UNIVERSITY OF CAPE COAST

FACTORS CONTRIBUTING TO THE ACADEMIC ACHIEVEMENT OF JUNIOR HIGH SCHOOL STUDENTS IN ABOOM CIRCUIT, CAPE COAST

ESTHER ABA QUANSAH

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BY

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Thesis submitted to the Department of Education and Psychology of the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Educational Psychology

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: ..... Date: .....

Name:…… ……...

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: .....Date……

Name:…… ……

Co-Supervisor's Signature: .....Date……

Name:……..

ABSTRACT

The present study investigated of factors contributing to the academic achievements of students in the Aboom Circuit of the Cape Coast Metropolis during 2015-2016 academic years. The study employed descriptive, cross-sectional survey design, using questionnaires for data collection. A simple random sampling technique was used to select 350 JHS students and a census method was conducted on 30 teachers. The data was analysed and discussed using descriptive and inferential statistics. The study found that both teachers and students had positive views concerning school-related factors, teacher-related factors, and home-related factors and those student-related factors were seen as significantly contributing to students' academic achievement. The study further found that teacher-related factors and home-related factors were positively correlated with students' academic achievement while school-related factors and student-related factors had negative association with students' academic achievement. The study recommended that the Ministry of Education/Ghana Education Service in partnership with school administration should provide adequate teaching and learning resources and a conducive school atmosphere to enhance effective teaching and learning in school. It is recommended that the Ministry of Education/Ghana Education Service should continually organise seminars, short courses, trainings and workshops for all the teachers on teaching strategies, classroom management and motivation. It is recommended that school administrators should involve parents on every educational issue and implement school involvement activities that are specifically geared toward parents from the lower socio-economic group.

KEY WORDS

Academic Achievement

Home-Related Factors

School-Related Factors

Student-Related Factors

Teacher-Related Factors

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DEDICATION

To my husband, Mr Christian Kwame Arthur-Sarfo and my lovely children,

Nhyiraba Sarfowaa Arthur-Sarfo and Christian Noel Kow Arthur-Sarfo

(Junior)

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CHAPTER ONE

INTRODCUTION

Background to the Study

Students are the key assets of every school and schools have no worth without students. The social and economic development of the country is directly linked with students' academic achievement. The students' academic achievement plays an important role in producing the best quality graduates who will become great leaders and constitute the manpower for the country, or become responsible for the country's economic and social development (Adane, 2013; Otoo, 2007). High education achievement depends upon the academic achievement of students measured. The measurement of students' previous educational outcomes is the most important indicators of students' future achievement. That is, the higher the previous achievement, the better will the student's academic achievement in future endeavors be (Etsey, Amedahe, & Edjah, 2005).

In Ghana, the academic achievement of students who go through basic education is assessed through Basic Education Certificate Examination (BECE). Unfortunately, the BECE results have been disappointing with high numbers of failures every year. For example, from 2008 to 2011, the BECE pass rates had drastically declined from 62.18% in 2008, 50.21% in 2009, 49.12% in 2010 and 46.93% in 2011(WAEC's Chief Examiner Report, 2012). This buttresses the fact that poor achievement in BECE is a problem which needs to be tackled (WAEC's Chief Examiner Report, 2012) Over the past

decade, a total of 1,562,270 (representing about 42.6%) students have failed their BECE out of a total number of 3,669,138.

In 2014, Ghana Education Service announced that over 182,000 students who failed one or more core subjects in BECE were not placed in any senior high school by the Computerized School Selection System and as a result, the GES was giving a second chance to candidates who could not get placement into second cycle institutions. According to the General Resume of the WAEC Chief Examiners Report on the standard of papers for the April 2015 BECE examinations, in Integrated Science, some candidates' inability to apply scientific knowledge to physical phenomenon was evident. Again, according to the Chief Examiner's Report for Mathematics and Integrated Science, it was observed that some candidates were unable to write figures in standard form (WAEC, Chief Examiner's Report, 2015). Students' achievement is considered a vital indicator of good schooling; so the poor achievement of pupils at the basic level of education has not only led to public outcry, but also educationists have been increasingly occupied in their attempt to identify factors that influence pupils' achievement especially in the BECE in Ghana (Otoo, 2007).

From the literature, it is seen that student's achievement is affected by social, psychological, economic, environmental and personal factors. These factors strongly influence student achievement, but they vary from person to person and country to country (Ampiah, 2010). Many researchers have discussed the different factors that affect the student academic achievement in their research (Adane, 2013; Ankomah, Koomson, Bosu, Oduro, 2005, Anamuah-Mensah, Mereku, & Ampiah, 2008; Etsey, 2005).

For example, Anamuah-Mensah, Mereku and Asabere (2004), have attributed the phenomenon to lack of effective supervision and monitoring at school, lack of motivation for teachers and inadequate number of qualified teachers to fill empty classrooms. Also, Etsey (2005) accredited the cause of poor academic achievement in the Shama Sub-Metro of Shama Ahanta East Metropolitan Assembly (SAEMA) in Ghana to a combination of factors relating to the school environment, teachers, pupils and parents. In the same vein, Diaz (2003) found factors such as intellectual ability, poor study habit, achievement motivation, lack of vocational goals, low self-concept, of the family, poor family structure and anxiety as contributing to educational achievement.

There are two types of factors that affect the students' academic achievement. These are internal and external classroom factors. Internal classroom factors include students' competence, class schedules, class size, text books, class test results, learning facilities, homework, environment of the class, complexity of the course material, teachers' role in the class, and technology used in the class and exams systems (Ankomah et al., 2005; Etsey, 2005). External classroom factors include extracurricular activities, family problems, work and financial problems, social problems among others (Ankomah et al., 2005; Etsey, 2005).

Studies have shown that students' achievement depends on many factors such as learning facilities, gender and age differences and so on that can affect student achievement (Hansen, 2000). Harb and El-Shaarawi (2006) found that the most important factor with positive effect on students' achievement is parental involvement. It is important for us to know that the

findings of these studies varies from region to region and their results differ in cities and rural areas.

Graetz (2000) conducted a study on socio-economic status of the parents of students and concluded that the socio- economic background has a great impact on student's academic achievement. It has been a main source of educational imbalance among students and students' academic success. Considine and Zappala (2002) in their study on the influence of social and economic disadvantage on the academic achievement of school students, noticed that parents or guardians who have social, educational and economic advantage definitely strengthen the level of their child's success in future. Amutabi (2003) has also discussed the impact of socio-economic status on children's readiness for school. Even in families with above average income, parents often lack the time and energy to invest fully in their children's preparation for school, and they sometimes face a limited array of options for high-quality child care both before their children start school and during the early school years (Ominde, 2004).

Families with often lack the financial, social, and educational supports that characterize families with high socio-economic status. Poor families also may have inadequate or limited access to community resources that promote and support children's development and school readiness (Okioga, 2013). Parents may have inadequate skills for such activities as reading to and with their children, and they may lack information about childhood immunizations and nutrition (Okioga, 2013). Having inadequate resources and limited access to available resources can negatively affect families' decisions regarding their young children's development and learning. As a result, children from families

with are at greater risk of entering kindergarten unprepared than their peers from families with median or high socio-economic status (Lareau, 2004).

Marquez (2009) also pointed out that a student who is successful in his/her desired career has good study habits. In line with this, she stated that students should apply these habits in all their lessons. She also suggested that students should not try to study all the subjects in a single period. Several studies found that increased frequency of activities were associated with higher levels of child misbehavior in the classroom (Schlee, Mullis & Schriner, 2008; Abar, Carter & Winsler, 2008).

Aitken (2004) significantly accentuated the importance of having qualified teachers in the field of teaching, and found that the success of any programme is conditioned by the ability of the teacher to teach. He further found that if there is failure at this point, the whole structure fails. Hence, the implementation, selection, preparation, and supervision of education will be affected. Moreover, Naseer and Muhammad (2007) observed that good teachers are continually on the watchful for methods and instructional materials that will make learning meaningful. With the wise selection and use of a variety of instructional materials or audio-visual materials, experiences may be provided to develop understanding.

From these findings, I can deduce that the factors affecting a student's academic achievement arise from several reasons. In Ghana, the socio-economic status (henceforth, SES) of a family is usually linked with the family's income, parents' educational level, parents' occupation and social status (Ankomah & Hope, 2011). Ford and Harris (2007) followed this logic while examining parental influences on students' school achievement, by

focusing on specific socio-demographic factors, including parents' level of education, marital status and family income.

It is generally believed that children from high and middle SES parents are better exposed to a learning environment at home because of provision and availability of extra learning facilities. But does the affirmed impact of low SES of the parents really account for students' low academic achievement? Socio-demographic variables do not fully account for the academic successes or failures of minority students. Despite the severe threats and challenging obstacles inherent in low-SES, and/or low parental educational attainment, and other possible unforeseen obstacles, some of these students record remarkable successes in their education. The current study sought to examine factors that contribute to the academic success of these low-SES students in the Aboom Circuit.

Statement of the Problem

Over the past few years, concerns have been raised by stakeholders about the poor academic achievement of students in Aboom circuit of the Cape Coast Metropolis. A study of the BECE results of the schools from 2009 to 2015 buttresses this observation. In 2009, only 50.21% of the candidates passed their core subjects (Mathematics, English and Integrated Science). In 2010 and 2011, only 49.12% and 46.93% respectively of the students passed. The Chief Examiner's Report (2015) revealed that the standard of the candidates' achievement was diverse. Candidates' achievement in Mathematics, English, Social Studies, French, and Religious and Moral Education was considered as average. Their achievement in Fante was described as poor. The standard of achievement in Integrated Science was

reported to be below that of the previous years. According to the Chief Examiner's Report, about 437,942 candidates took the exams, with 229,651 being males and 208,291 females, and the results of 6,812 candidates, had been withheld pending the conclusion of investigations into alleged examination malpractices. Again, in 2016, the Chief Examiner's Report revealed that the entire results of candidates from 321 schools have been withheld for alleged examinations irregularities and that 188 students had some of the results cancelled while 22 candidates had their entire results cancelled owing to examination malpractices (WAEC, Chief Examiner's Reports, 2015, 2016). In 2017, statistics on academic achievement of students in the Aboom circuit recorded a pass of 42.0% (WAEC, Chief Examiner's Reports, 2017). The statistics indicate a decline in students' achievement.

This situation raises questions about the depth of understanding of factors affecting the low achievement of students of the Aboom Circuit JHS. The pertinent questions to address, therefore, are: what is the cause of this poor academic achievement of students? Is the fault entirely that of teachers or students or both of them? Or is the poor achievement of students caused by parents' neglect or school environmental factors?

A study published by American Psychological Association (2001) found that children of parents with high socio-economic statuses tended to express more "disengagement" behaviours than their less fortunate peers. In this context, disengagement behaviours represent actions such as fidgeting with other objects and drawing of pictures while the children were being addressed. Other participants born into less favoured circumstances tended to make more eye contact, nods as signs of happiness when put into an

interactive social environment. The more fortuitous peers felt less inclined to gain rapport with their group because they saw no need for their assistance in the future.

A family's socio-economic status is based on family income, parental education level, parental occupation, and social status in the community such as contacts within the community, group associations, and the community's academic achievement of the family. Families with high socio-economic status often have more successes in preparing their young children for school because they typically have access to a wide range of resources to promote and support young children's development. They are able to provide their young children with high-quality child care, books, and toys to encourage children in various learning activities at home. Also, they have easy access to information regarding their children's health, as well as social, emotional, and cognitive development. In addition, families with high socio-economic status often seek out information to help them better prepare their young children for school.

A considerable number of studies such as Beauvais and Jensen (2003). have shown repeatedly that low-SES is linked to a range of indicators of child and adolescent well-being, including students' academic achievement and student family background is widely recognised as the most significant important contributor to success in schools (Beauvais & Jensen, 2003). Lower income children have less stable families, greater exposure to environmental toxins and violence, and more limited extra-familial social support networks, which collectively leads to low academic achievement (Evans, 2004). However, there are some students of low-SES who are able to achieve high

academic achievement against all odds. Several studies have identified individual effort as a factor that enhances higher academic achievement among students of a low-SES background (Adane, 2013; Saani, 2012). At its face-value, observations in the Aboom Circuit appear to align with this information regarding the resiliency of children despite their low-SES status.

Unfortunately, it appears not much have been done in terms of scientific research to ascertain the factors responsible for such academic success. This study therefore sought to examine the factors responsible for academic achievement of students of Low-SES in the Aboom circuit. The study aimed at finding out factors contributing to the high academic achievements of students in the Aboom Circuit of the Cape Coast Metropolis.

Purpose of the Study

The main purpose of the study was to examine the factors contributing to the academic achievement of low SES JHS students in the Aboom Circuit. Specifically, the study was guided by the following specific objectives, which are to:

1. identify school-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit
2. examine teacher-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit
3. ascertain home-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit
4. examine student-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit

Research Questions

The following research questions were formulated to guide the study:

1. What are the school-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit?
2. What are the teacher-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit?
3. What are the home-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit?
4. What are the student-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit?

Research Hypotheses

1. H_0: There is no significant correlation between school-related factors and academic achievement of low-SES JHS students in the Aboom Circuit
2. H_0: There is no significant correlation between teacher-related factors and academic achievement of low-SES JHS students in the Aboom Circuit
3. H_0: There is no significant correlation between home-related factors and academic achievement of low-SES JHS students in the Aboom Circuit
4. H_0: There is no significant correlation between student-related factors and academic achievement of low-SES JHS students in the Aboom Circuit
5. H_0: There is no significant impact (prediction) of school, teachers, home and personal factors on students' academic achievement

Significance of the Study

This study sheds more light into the causal relationships among school environment, home, teacher, education administrators and student related variables under investigation that influence the academic achievement of pupils of low SES. The study may be helpful for both school policy makers and parents. It may help the school administrators to design and implement policies to improve students' achievement and the quality of education by changing the attitude of students towards learning, facilitating students' learning and improving teaching procedures. The outcome of the study is therefore expected to assist all stakeholders in the district, particularly those at the basic education level, to fashion out appropriate strategies that would enhance the academic achievement of students.

In this regard, the study would be useful to the Aboom Circuit in the analysis of the causes of poor achievement in BECE. At the school level, the school children would benefit as the study will help them perform better as they successfully progress through the stages of education. They would therefore have more life opportunities and also improve their family lives and socio-economic conditions. At the community level, the Aboom Circuit would benefit from improved quality of education and successful students and citizens. The community would also get more contributions from its members. And at the regional level, identifying the variables that influence the achievement of young individuals at school is of great importance, because it would serve as an essential tool for the Ghana Education Service and other policy makers in the design of education policies. This would eventually lead to a rise in the number of pupils who pass BECE nationally. The study would

also add to the body of knowledge in the study area. Parents can use the outcomes of the study to solve their students' problems, especially, financial problems and to look after them more effectively. The study also creates awareness among students about their rights and responsibilities to help them achieve quality education. Lastly, the findings of this study will add to the existing knowledge on the issue of factors accounting for students' high academic achievement.

Delimitation

The study was delimited to the factors contributing to the academic achievement of low-SES JHS students in the Aboom circuit of the Cape Coast Metropolis. Geographically, the study was delimited to JHS students and teachers in the Aboom Circuit. With regard to variables, the study considered variables such as school, home and personal related factors, students' academic achievement in the Aboom circuit

Limitations

One limitation was the cross-sectional nature of the study. The nature of cross-sectional study is such that data is collected at only one point in time rather than collection of data at different periods of time. Also, this study covers only five public JHS in the Aboom Circuit; hence, it would be difficult to generalise the findings to the population as a whole. As such, while the findings from this research may be used to guide future research efforts, it cannot be applied to other settings. Also, the unstandardised nature of the academic achievements used made the generalisation of the study findings difficulty to be done. Despite the above limitations, the study has implications for practitioners.

Definition of Terms

1. Academic Achievement – Scores obtained by students in a test.
2. Home-Related Factors – Things in the home which affect students' academic achievement.
3. School-Related Factors - Things in the school which affect students' academic achievement.
4. Student-Related Factors – Traits and attributes of the students which contribute to their academic achievement.
5. Teacher-Related Factors - Traits and attributes of the teachers which contribute to students' academic achievement.

Organisation of the Study

This study is organized into five chapters. The first chapter deals with the general introduction of the study, background to the problem, statement of the problem, purpose of the study, research questions, and significance of the study, delimitation and limitations of the study. Chapter Two of the study deals with the review of related literature. It presents the theoretical framework, conceptual framework and empirical review. Chapter Three presents the methodology employed in the study including: the research design, population, sample and sampling procedure, research instrument, validity and reliability of instrument, data collection procedure and data processing and analysis procedure. Chapter four of the study deals with the presentation and analysis of results as well as the discussion of the findings of the study. Chapter five concludes with a summary of the study, presents conclusions based on the findings, and makes recommendations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Every researcher reviews related literature from the different resources that include research journal, articles, books, magazines, encyclopedias, dissertations, abstracts, international year books, theses and most important in the present era, the internet databases. The detailed account of the review of related literature pertaining to variables under study, namely theoretical framework (human capital theory and self-determination theory of Motivation) and conceptual review on academic achievement, school-related factors, teacher-related factors, home- related factors, personal-related factors and students' gender and academic achievement are presented in this chapter.

Theoretical Framework

There are several theories that explain students' academic achievement, yet in this study, the human capital theory and self-determination theory of motivation are reviewed.

The Human Capital Theory

The study is rooted in human capital theory. Human capital theory was first developed by the economists Schultz (1962) and Becker (1962) to account for increases in students' achievement (productivity) that could not be explained by improvements in technology or financial capital. The idea behind human capital is that the skills, talents and knowledge of people amount to a kind of "capital" analogous to financial assets (Psacharopoulos & Patrinos,

2004). The human capital model is an elaboration of the common sense notion that the function of schools is to teach students; that is, to provide them with information and skills that will be valuable in later life (Beach, 2009).

The human capital theory rests on the assumption that formal education is highly instrumental and necessary to improve the productive capacity of a population. Further, the human capital theory is concerned with the wholesome adoption of the policies of education and development. In short, the human capital theorists argue that an educated population is a productive population (Rastogi, 2002). Theory emphasizes how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability, which is a product of innate abilities and investment in human beings (De la Fuente & Ciccone, 2002). The provision of formal education is seen as an investment in human capital, which proponents of the theory have considered as equally significant or even more worthwhile than that of physical capital (Psacharopoulos & Woodhall, 2007).

Fagerlind and Saha (2007) posit that the human capital theory provides a basic justification for large public expenditure on education both in developing and developed nations. The principal avenues of human capital enhancement are formal and informal schooling and job training. The theory suggests that, assuming people are rational, individual schools and parents make investments in their students with the expectation of realizing benefits of higher income and a better job in the future. Human capital comes into play in the dropping out of problems in terms of the family and community intellectual environment. It is known that children of parents with high

educational attainment tend to do better in school than those with low educational attainment (Schultz, 2001). This effect probably results from the transmission of values and expectations from the parents to their children as well as from the general cognitive environment of the home.

The human capital theory concludes that investment in students will lead to greater economic outputs; however, the validity of the theory is sometimes hard to prove and is contradictory. Modern economists seem to concur that education is the key to improving human capital and ultimately increasing the economic outputs of the nation (Becker, 1993; Healy, 2001). Further, the human capital theory stresses the significance of education and training as the key to participation in the new global economy. The OECD (2014) also boldly asserts that internationalism is a means of improving the quality of education. In keeping with human capital theory, it has been argued that the overall economic achievement of the OECD countries is increasingly more directly based upon their knowledge stock and their learning capabilities. Clearly, the OECD is attempting to produce a new role for education in terms of human capital subject required in globalized institutions.

There is some evidence on the non-monetary benefits of education. More educated individuals have better health knowledge and better health status, even after controlling for such variables as family income (Grossman, 2006; Kenkel, 2000). Other cited benefits include transmission of cultural values (Coleman, 2008; McMahon, 2009), more intelligent voting behavior (Barr, 2010; Brennan, 2008) and reduced predisposition to criminal behavior (Goldin, & Lawrence, 2011). The evidence on the benefits of education is

reinforced by a large literature on comparisons of international economic achievement.

Application of Human Capital Theory to Educational System

In order to enhance human development in the general society, it is necessary to apply the theory of human capital to educational systems. By such means, productivity is enhanced and sustained based on an increased and diversified labor force. Babalola (2003) asserts that the contribution of education to economic growth and development occurs through its ability to increase the productivity of an existing labor force in various ways. Therefore, an economic appraisal of educational investment projects should take into account certain criteria. According to Psacharopoulos and Woodhall (2007), the criteria include:

1. Direct economic returns to investment, in terms of the balance between the opportunity costs of resources and the expected future benefits;
2. Indirect economic returns, in terms of external benefits affecting other members of society;
3. The private demand for education and other factors determining individual demand for education;
4. The geographical and social distribution of educational opportunities;
5. The distribution of financial benefits and burdens of education.

Education plays a great and significant role in the economy of a nation; thus, educational expenditures are found to constitute a form of investment. This augments individuals' human capital and leads to greater output for society and enhanced earnings for the individual worker. It increases their chances of employment on the labour market, allows them to reap pecuniary

and non-pecuniary returns and gives them opportunities for job mobility. It is also established that Education is a source of economic growth and development only if it is anti-traditional to the extent that it liberates, stimulates, and informs the individual and teaches him how and why to make demands (Odekunle, 2001)

Criticism of Human Capital Theory

Human Capital Theory has been criticised on a number of counts. Two critiques are outlined here: one, external and the other internal. The clearest statement of the deficiencies of human capital theory goes to the heart of neo-classical economics. The revival of economic sociology seeks to challenge the basic assumptions motivating the methodology of neo-classical economics. Their claims rest on two basic building blocks (Green, Little, Kamat, Oketch, & Vickers, 2007). The first is the idea that the economy is an analytically separate realm of society that can be understood in terms of its own internal dynamics. Economists are perfectly aware that politics and culture influence economy, but they see these as exogenous factors that can be safely bracketed as one develops a framework that focuses on purely economic factors. The second key foundation is the assumption that individuals act rationally to maximise utilities. Here again, economists are acutely aware that individuals are capable of acting irrationally or pursue their goals other than the maximisation of utility, but the strategy of excluding these deviations from the rationality principle is justified by the efforts to identify the core dynamics of an economy (Glewwe, 2002; Green et al., 2007).

A further criticism of human capital theory concerns a more technical problem with criticisms about the employment of the theory as a means of

accounting for national economic growth. Arguments about economic growth accounting such as Becker's (1993), show at best that education contributes to differences in earnings between people and then only in certain circumstances. To buttress this, researchers (Neumayer, 2012; Luis, 2000) argued that the models so far examined in the growth accounting literature fail utterly to explain the mechanism by which this effect is produced. The contention that economic growth emanates from education is a non-sequitur because, while it may be granted that education contributes to growth, just as many other activities do, he says that what must be illustrated is "not that education contributes to growth, but that more education would contribute more to growth at the margin than more health, more housing and more roads (Keeley, 2007; Lawn, & Grek, 2012).

Self-Determination Theory of Motivation

Self-determination theory (Deci & Ryan, 2002) is a general theory of motivation that purports to systematically explicate the dynamics of human needs, motivation, and well-being within the immediate social context. The term, "self-determination," as defined by Deci and Ryan (2002), is ''a quality of human functioning that involves the experience of choice. It is the capacity to choose and have those choices . . . is the determinants of one's actions" (p. 38). The self-determination theory proffers that humans have three universal and basic needs: autonomy (a sense of control and agency), competency (feeling competent with tasks and activities), and relatedness (feeling included or affiliated with others). Individuals experience an elaborated sense of self and they achieve a better psychological well-being through the satisfaction of the three basic needs (Deci & Ryan, 2002).

Conversely, the deprivation of the three basic needs produces highly fragmented, reactive, or alienated selves. Another central tenet of SDT is that as opposed to other motivational theories (e.g., Bandura's social cognitive theory) that treat human motivation as a monolithic construct, SDT theorizes human motivation into three main categories: intrinsic motivation (doing something because it is enjoyable, optimally challenging, or aesthetically pleasing), extrinsic motivation (doing something because it leads to a separable outcome) and amotivation (the state of lacking intention to act). Extrinsic motivation is further categorized into four stages/types: (1) external regulation, (2) introjected regulation, (3) identified regulation, and (4) integrated regulation (Deci & Ryan, 2002).

The above-mentioned types of motivation, as shown in Figure 1 are loaded on a continuum of self-determination. Amotivation represents the least self-determined type of motivation while intrinsic motivation signifies the most self-determined type of motivation. According to SDT, self-determined types of motivation (intrinsic motivation and identified regulation) may lead to positive outcomes while non-self-determined types of motivation (amotivation, external and introjected regulations) may result in negative outcomes (Deci & Ryan, 1991).

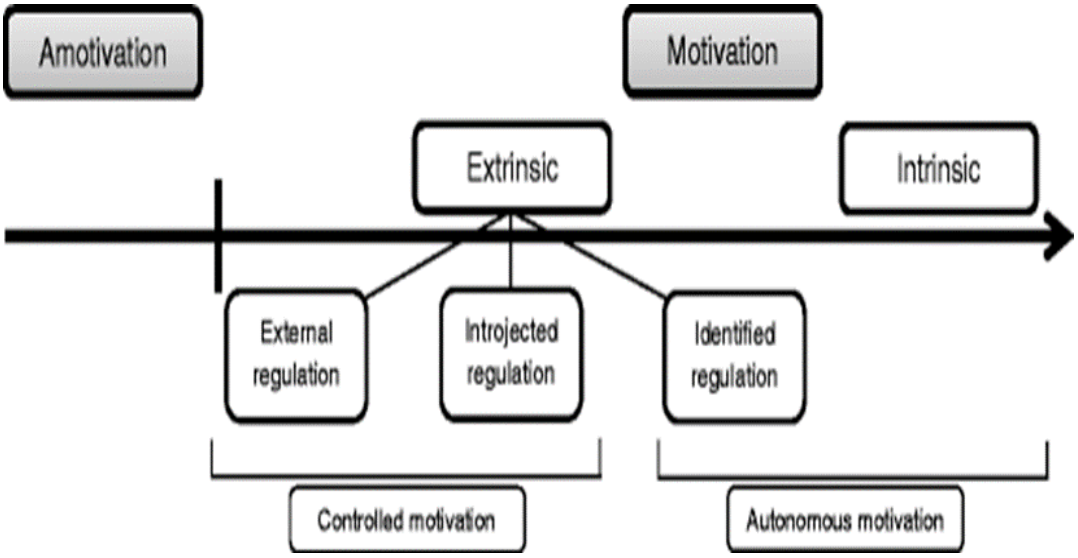

Figure 1. The self-determination continuum

Source: Adopted from Deci & Ryan(1991)

In Self-Determination Theory, different types of motivation are based on the different reasons or goals that give rise to an action. The most basic distinction is between *intrinsic motivation*, which refers to doing something because it is inherently interesting or enjoyable, and *extrinsic motivation*, which refers to doing something because it leads to a separable outcome. Over three decades of research has shown that the quality of experience and achievement can be very different when one is behaving for intrinsic versus extrinsic reasons. One purpose of this review is to revisit this classic distinction between intrinsic and extrinsic motivation and to summarize the functional differences between these two general types of motivation. Intrinsic motivation has emerged as an important phenomenon for educators a natural wellspring of learning and an achievement that can be systematically catalyzed or undermined by parent and teacher practices. Because intrinsic motivation results in high-quality learning and creativity, it is especially important to

detail the factors and forces that engender versus undermine it (Deci, & Ryan, 2000).

However, equally important in the current review is the explication of the very different types of motivation that fall into the category of extrinsic motivation. In the classic literature, extrinsic motivation has typically been characterized as a pale and impoverished (even if powerful) form of motivation that contrasts with intrinsic motivation (Moore, 1993). However, SDT proposes that there are varied types of extrinsic motivation, some of which do, indeed, represent impoverished forms of motivation and some of which represent active, agentic states. Students can perform extrinsically motivated actions with resentment, resistance, and disinterest or, alternatively, with an attitude of willingness that reflects an inner acceptance of the value or utility of a task.

In the former case, the classic case of extrinsic motivation, one feels externally propelled into action; in the latter case, the extrinsic goal is self-endorsed and thus adopted with a sense of volition. Understanding these different types of extrinsic motivation, and what fosters each of them is an important issue for educators who cannot always rely on intrinsic motivation to foster learning (Gunawardena, 1995).

Application of Self-Determination Theory in Learning

A number of factors suggest that SDT is an appropriate framework for addressing motivation in the learning environment. First, SDT may serve as a theoretical framework that integrates issues in online learning. The Self-determination theory addresses autonomy, relatedness, and competency as determinants of motivation. The three constructs correspond to features of

online learning such as flexible learning, computer- mediated communication and social interaction and challenges for learning technical skills (Howland & Moore, 2002).

The notion of contextual support is especially valuable, as learners need a variety of support from instructors, peers, administrators, and technical support personnel (Ryan, & Deci, 2000; Mills, 2003). Past experimental research indicates that self-determination theory predicts a variety of learning outcomes, including achievement, persistence, and course satisfaction (Deci & Ryan, 2002). Self-determination theory has the potential to address learning problems such as student attrition in the learning environment. Another advantage of SDT is that it generates prescriptions for motivational enhancement in addition to describing individuals' motivation process. Self-determination theory-based studies have identified strategies that foster individual self-determination and motivation. Reeve and Jang (2006), for example, validated eight types of teacher's autonomy-supportive behaviors, such as allowing choice, providing rationale, and offering informational feedback that enhanced students' perceived autonomy, engagement, and achievement.

The SDT-based strategies may be applicable to a variety of educational settings including the online learning environment. Self-determination theory emphasizes the importance of the social context, which aligns with the emerging trend of a situated view of motivation. Jarvela (2001) for instance said, ''Motivation is no longer a separate variable or a distinct factor, which can be applied in explanation of an individual's readiness to act or learn – but it is a reflective of the social and cultural environment" (p. 4). The self-

determination theory again purports to explicate the dynamics of human need, motivation, and well-being within the immediate social context. The SDT framework enables researchers to examine the mechanism through which contextual factors, such as instructor behaviors or social interactions, enhance or dampen motivation of learners. The SDT framework also helps instructors and instructional designers identify better strategies of learner support.

Empirical Studies

Student Academic Achievement

The concept of achievement has several references. It usually denotes activity and mastery, making an impact on the environment and competing against some standard of excellence. The under achieving child is one whose actual attainment, as indicated by his scholastic attainment in school, does not measure up to his potential achievement as indicated by his abilities (Ghanney, 2007). Students' academic achievement is considered as an index of efficiency and quality of education management, or management of learning /teaching activities. Darling (2005) stated that academic achievement is knowledge, understanding, skills, learning attitudes and all of which can be assessed by means of many tests during or after learning – teaching activity.

Moreover, academic achievement can indicate learners' quality, the value of the curriculum, quality of learning / teaching activity management, and ability of both instructors and executives (Ferla, Martin & Yonghong, 2009). Academic achievement as achievement on tasks with measures including comprehension, quality and accuracy of answers of tests, quality and accuracy of problem solving, frequency and quantity of desired outcome, time or rate to solution, time on task, level reasoning and critical thinking,

creativity, recall and retention, and transfer of tasks (Cary, Roseth, David & Roger, 2008).

Academic achievement refers to a successful accomplishment or achievement in a particular subject area and is indicated by grades, marks and scores of descriptive commentaries (Dimbisso, 2009). Academic achievement also refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers in a fixed time or academic year (Dimbisso, 2009). Academic achievement is the amount of knowledge derived from learning. The child gains knowledge by instructions he/she receives at school and are organized around a set of core activities in which a teacher assigns tasks to students and evaluates and compares the quality of their work (Etsey et al, 2005).

Kevin (2000) also defined over achievers as students whose school attainment is in excess of expectations formed on the basis of their activities. The concept of over and under achievement suggests that there are variables in addition to ability which have positive effects on achievement and that there is no perfect positive correlation between intelligence and attainment. The concept of low academic achievement varies in its definition. Diaz (2003) considers low academic achievement or academic failure as the situation in which the subject does not attain the expected achievement according to his or her abilities, resulting in an altered personality which affects all other aspects of life. Similarly, Nonis, Philhours, Syamil and Hudson (2005) note that while the current educational system perceives that the student fails if he or she does not pass, more appropriate for determining academic failure is whether the student performs below his or her potential.

Aremu (2000) defines poor academic achievement as a achievement that is adjudged by the examinee/testee and some other significant as falling below an expected standard. The interpretation of this expected or desired standard is better appreciated from the perpetual cognitive ability of the evaluator of the achievement. The evaluator or assessor can therefore give different interpretations depending on some factors. Poor academic achievement is any achievement that falls below a desired standard. The criteria of excellence can be from 40 to 100, depending on the subjective yardstick of the evaluator or assessor (Aremu, 2004; Asikhia, 2010)

Most of the researchers around the world used the GPA to measure the student achievement (Galiher, 2006; Darling, 2005). They used GPA to measure student achievement in a particular semester. Some other researchers, they measure student achievement through the results they obtain from a particular subject or the previous year's results (Hijazi & Naqvi, 2006). In this study, I measured the student academic achievement through their third term assessment results (using 30% continuous assessment and 70% end-of- term exams).

Factors Influencing Students' Academic Achievement

Various factors have been given as contributing to the high academic achievements of students. Rothstein (2000) argues that learning is not only a product of formal schooling but also of communities, families and peers. Socio-economic and socio-cultural forces can affect learning and thus school achievement. In this section, the researcher reviews literature on school related factors, teachers-related factor, home-related factors, student characteristics, and gender differences in academic achievement

School-Related Factors and Students' Academic Achievement

Several school environmental factors have generally been identified as influencing academic achievement. These include availability of instructional materials, school location and quality of the physical facilities, class sizes and pupil-teacher ratios, teacher qualification and experience, and supervision.

Karemera (2003) found that students' achievement is significantly correlated with satisfaction with academic environment and school facilities such as library and computer lab in the institution. With regard to background variables, he found a positive effect of high school achievement and for school achievement; he found no statistical evidence of significant association between family income level and academic achievement of the student. Robert and Sampson (2011), also found that the member of educational board will be educated and their impact on school is positive, for professional development it is essential for student learning. The students who are actively engaged in the learning process are observed to have a positive correlation with the CGP.

A study effort from student and the proper use of the facilities provided by the institution to the student, a good match between students' learning style and are positively affect the student's achievement (Norhidayah, Kamaruzaman, Syukriah, Mokhtar, & Andin, 2009). Student achievements are linked with use of library and level of their parental education. The use of the library positively affected the student achievement. The academic environment is the effective variable for students and it has positive relationship with fathers' education and grade level (Kirmani & Siddiquah, 2008). Also, school environment can affect students' academic achievement: insufficient number of advisors leading to inefficient counseling. Also, strict

regulations, overloaded assignments, severe punishment measures, influence of irresponsible friends, accommodation in poor surrounding (Sommai, 2008) can affect students' academic achievement.

According to Fetler (2001), teaching quality is positively related to students' achievement at 0.01 level of significance. In Laeheem's (2007) study, teaching quality held positive relation to students' academic achievement significantly at .001. Nevertheless, teachers' characteristics and teaching behavior held no significant relation to students' achievement (Lau, 2003). In related studies by Gaurdino and Fullerton (2010), the classroom atmosphere held positive relations to students' achievement with statistical significance at the level of .001

Instructional materials provide information, organise the scope and sequence of the information presented, and provide opportunities students to use what they have learnt. Students usually perform better when they have books or study aids to foster their learning. These study aids or material resources could be textbooks, teachers' guides, wall pictures, maps, atlases and other learning aids. The availability and use of teaching and learning materials affect the effectiveness of a teacher's lessons (Lockheed & Verspoor, 2001).

In addition, the school location and quality of the physical building influence the achievement and achievement levels of pupils. Harbison and Hanushek (2002) have stated that the quality of physical facilities is positively related to student achievement. This assertion corroborates that of Yinusa and Basil (2008), who stressed that good sitting arrangement and well-built schools produce high academic achievements and achievement, while

dilapidated buildings that lack mental stimulating facilities coupled with low or no sitting arrangements is destructive. According to Asikhia (2010), where the school is located determines to a very large extent the patronage such a school will receive.

Similarly, the entire unattractive physical structure of the school building could de-motivate learners to excel academically. This is what Isangedighi (2008) refers to as learner's environment mismatch. According to him, this promotes poor academic achievement. Engin-Demir (2009) argued that attending a school with a better physical environment is associated with increased maths scores. Adepoju (2001) found that students in urban schools manifest more brilliant achievements than their rural counterparts. Also, Ogunleye (2002) reported a significant difference in the achievement of students in urban peri-urban areas.

Class sizes have also been identified as determinants of academic achievement. Studies have indicated that schools with smaller class sizes perform better academically than schools with larger class sizes. Fabunmi, Brai-Abu and Adeniji (2007), for instance, indicated that three class factors (class size, student classroom space and class utilization rate), when taken together, determined significantly students' academic achievement in Oyo state, Nigeria. Similarly, Naseer and Muhammad (2007) found a significant correlation between school size and students' achievement in Pakistan. They revealed that small schools performed better than medium and large schools. In 2001, Tremblay, Ross and Berthelot (2001) found class size to be inversely related to achievement, especially for children in early grades. Kraft (2004) in his study of the ideal class size and its effects on teaching and learning in

Ghana concluded that class sizes above 40 have negative effects on students' achievement. Adeyela (2000) also found that large class size is unconducive for serious academic work.

Furthermore, schools with effective supervision of teaching and learning activities have high achievement rates. Etsey et al., (2005) in a study of 60 schools from peri-urban (29 schools) and rural (31 schools) areas in Ghana found that academic achievement was better in private schools than public schools because of more effective supervision of work. According to Etsey (2005), if circuit supervisors are more regular in schools, this would put the teachers on the alert to be more regular and early in school. This would forestall teacher absenteeism and improve teaching in the schools. If teachers are present and are always following regular visits of circuit supervisors, pupils would be challenged to change their attitudes toward school Etsey (2005).

Teacher-Related Factors and Academic Achievement

Several teacher factors influence academic achievement. These include teacher attendance in school, teachers' interest and motivation, and teaching effectiveness and methods of teaching. In the teacher-related aspects, the item 'Teacher has mastery of the subject matter' had the greatest mean with a very high impact. The rest of the indicators were deemed to be of high impact with the indicator, 'Teacher is always late' having the lowest mean. Fredriksen, Rhodes, Reddy and Way (2004) conducted a longitudinal study on the effects of adolescent sleep loss during middle school. Their study revealed that the participants' sleep loss had a relationship with more depressive symptoms, lower self-esteem, and lower grades.

The way adolescents sleep, critically influences their ability to think, behave, and feel during daytime hours. These findings are in alignment with the present study's findings whereby feeling sleepy in class is deemed to be most impactful on academic achievement among the personal conditions category. Being hungry in class came in second in the same subset. This is supported by previous research conducted by Deloitte and released by Share Our Strength shows that, on the average, students who eat school breakfast achieve 17.5% higher scores on standardized math's tests and attend 1.5 more days of school per year. It is also found that, students who attend class more regularly are 20% more likely to graduate from high school (Wolfson & Carskadon, 2003).

Kornell and Bjork (2007) have explored some of the study habits of college students. Research on memory provides a number of important suggestions about the most effective ways to study. One of the most important tips is that students should study by testing themselves rather than just reading over the material. It is also important for them to study over a period of days rather than waiting until the last minute to study. The study by Kornell and Bjork's suggest that only about 2/3 of college students routinely quiz themselves, and a majority of students study only one time for upcoming exams (Markman, 2012). These findings are consistent with this study's findings wherein it was discovered that among factors related to study habits; the indicator, 'I only study when there is a quiz' came out as the most impactful.

Another study was conducted in a context similar to the study in Iran by Zarei and Sharifabad (2012). This study intended to examine the effects of

frequent testing on Iranian English student's achievement and classroom attendance. The results revealed that the more frequently students were exposed to quizzes; the better their achievement appeared to be. Moreover, the results showed that the administration of frequent quizzes had a positive correlation with classroom attendance. It is also established that teacher regularity in school is important in terms of both children's access to education and the nature of that access. A widespread problem of teacher absenteeism is likely to contribute to poor pupil achievement.

The prevailing evidence is that teacher absenteeism at primary school level in Ghana appears to have worsened in the last fifteen years (World Bank, 2010). The World Bank Impact Evaluation of Basic Education (2010) in Ghana found that, "In 2003, nearly 13 per cent of teachers had been absent in the past month, compared to just over 4 per cent in 1988". It also observed that "In 2000, 85 per cent of schools did not suffer at all; whereas this figure has now fallen to 61 per cent, with 13 per cent of schools with over one-third of the teachers being absent for reasons other than sickness in the past month" (World Bank, 2010, p.13).

The study also found absenteeism to be significantly worse in rural schools than in urban schools, and worse in public schools compared to private schools. Similarly the CARE International's (2008) Report which examines deprived rural areas in Northern Ghana talks of, chronic teacher absenteeism which adversely affects the learning environment and Dunne and Leach (2005) discuss the low levels of professionalism in schools (especially the low performing ones), with teachers having high rates of lateness, absenteeism and sometimes refusing to teach classes.

The World Bank Report (2010) put forward a number of reasons for the increasing teacher absenteeism. These included teachers living long distances from schools and experiencing transportation difficulties, teachers having to travel to town once a month to collect their salaries, which may or may not have arrived; and, rural teachers engaging in farming activities. Although factors will be context-specific, multivariate analysis on teacher survey data also showed that teacher absenteeism was more likely to occur if the following factors were prevalent: poor working conditions, low morale, and high pupil-teacher ratio, living with spouse, being in their home district, and having good social relations (World Bank, 2010).

These last three factors were explained as possible causes of distraction from work. Barnes (2003) indicates how teachers are being encouraged in Ghana to facilitate local level development, which although can have positive impact on schooling, can also lead to teacher absenteeism and lateness. In another study, Fobih, Akyeampong and Koomson (1999) arrived unannounced in some 60 schools and found that about 85 per cent of teachers go to school late. They found that lateness ranged from five minutes up to one and a half hours. This meant teaching time was lost, teachers taught fewer school subjects (i.e. taught mainly English and Mathematics out of 10 subjects), and the shortening of the school day for students. Lateness and absenteeism were also found to affect the completion of syllabi. When the syllabus is not completed, pupils find it difficult to understand content that is to be taught in the next class which foundation in most cases is based on the previous class (Etsey, 2005; Etsey et al., 2005).

The assertion above was supported by Pryor and Ampiah (2003), who viewed that most children do not follow school work because they do not possess the understanding from previous work that is prerequisite for the syllabus of the higher grades of primary school and junior secondary school. Both absenteeism and lateness, as Bennell and Akyeampong (2007) point out, are symptomatic of education systems that are unable to manage teachers effectively, have weak teacher management structures, and are unable to provide incentives to motivate teachers to improve their attitudes to work.

Another factor is teacher motivation. A highly motivated person puts the maximum effort in his or her job. Ofoegbu (2004) linked poor academic achievement of students to poor teachers' achievement in terms of accomplishing the teaching task, negative attitudes to work and poor teaching habits which have been attributed to poor motivation. Corroborating this position, Lockheed and Verspoor (2001) asserted that lack of motivation and professional commitment on the part of teachers leads to poor attendance and unprofessional attitudes towards pupils which in turn affects the achievement of students academically.

The influence of effective teaching on pupils' academic achievement has been the subject of several studies. The quality of teachers and their commitment are key inputs in educational production to perform better achievement. A teacher's knowledge of the subject matter coupled with textbooks, instructional time and other learning materials have great influence on learning at the basic school level (Lockheed & Verspoor, 2001). Agyemang (1993) reported that a teacher who does not have the academic and the professional teacher qualification would undoubtedly have a negative

influence on the teaching and learning of his/her subject. According to Hedges (2002), many trained teachers are unwilling to accept postings to deprived communities in Ghana. As a result, there is a tendency for less qualified teachers to be employed in these communities, which affects their academic achievements negatively. Darling-Hammond (2000) found that teacher quality characteristics such as certification status and degrees in subject to be taught are very significant and positively correlated with subject outcomes in Science and Mathematics.

Ingersoll (2006) found out that 63 per cent of Chemistry, Physics, and Earth and Space Science instructors do not have certification in the subjects and these results in the poor achievement of students in American Secondary schools. Also, Greenwald, Hedges and Laine (2006) found academic achievement to be positively correlated with teacher qualification. Additionally, Abuseji (2007) found teacher's qualification to be the second most potent causal effect on student's achievement in Chemistry. Its direct and indirect effect accounted for 4.37 per cent, and 5.00 per cent of the total effect on students' achievement in Chemistry in Lagos state, Nigeria. Okoruwa (2009) found that teachers' teaching experience had significant effect on students' achievement in science. Also, Fettler (2009) investigated the relationship between measures of teachers' experience and student achievement in Science and Mathematics. He found that teaching experience as measured by years of service correlated positively with student test results.

Effective teaching embraces a variety of different aspects of teaching such as subject mastery, effective communication, lesson preparation and presentation, pacing the class to the students' level and taking into account

individual differences, allowing students to practice and applying what they have learnt, letting students know what is expected of them, and monitoring and evaluating achievement so that students learn from their mistakes (Lockheed & Verspoor, 2001; Ingersoll, 2001). Jacob and Lefgren (2006) have also found a positive correlation between effective teaching and academic achievement. Similarly, Adediwura and Tayo (2007) suggest that effective teaching is a significant predictor of students' academic achievement and conclude that effective teaching produces students of higher academic quality. Akiri and Ugborugbo (2009) showed that effective teaching produced better performing students.

Home-Related Factors and Academic Achievement

Whether a child performs well in school can be influenced by a range of household factors. These include socio-economic status (education, occupation and income), size of the household, type of discipline at home, family structure, and the level of parental involvement and interest in child schooling are all factors which affect achievement in school. The home environment also affects the academic achievement of students. Educated parents can provide such an environment that suits best for academic success of their children. The school authorities can provide counseling and guidance to parents for creating positive home environment for improvement in students' quality of work (Marzano, 2003).

The academic achievement of students heavily depends upon the parental involvement in their academic activities to attain the higher level of quality in academic success (Barnard, 2004). The environment and the personal characteristics of learners play an important role in their academic

success. The school personnel, members of the families and communities provide help and support to students for the quality of their academic achievement. This social assistance has a crucial role for the accomplishment of achievement goals of students at school. Besides the social structure, parents' involvement in their children's education increases the rate of academic success of their child (Goddard, 2003).

Above and beyond the other demographic factors, the effects of SES are still prevalent at the individual level (Capraro, Capraro & Wiggins, 2000). The SES can be deliberated on a number of ways; it is most often calculated by looking at parental education, occupation, income, and facilities used by individuals separately or collectively. Socio-economic status is an economic and sociological combined total measure of a person's work experience and of an individual's or families' economic and social position relative to others, based on income and education, and occupation (Marmot, 2004).

When analyzing a family's social economic status, the household income, earners' education and occupation are examined, as well as combined income, versus that of an individual, when their own attributes are assessed. Lareau (2003) observes that socio-economic status is typically organised into three categories: high, middle, and low to describe the three areas a family or an individual may fall into when placing a family or individual into one of these categories any or all of the three variables income, education, and occupation can be assessed. Additionally, low income and little education have shown to be strong predictors of a range of physical and mental health problems due to environmental conditions which may be the entire cause of that person's social predicament to begin with.

Parental education and family SES levels have positive correlations with the student's quality of achievement (Jeynes, 2002; Mitchell & Collom, 2001). The students with high level of SES perform better than the middle class students and the middle class students perform better than the students with low level of SES (Garzon, 2006; Kirkup, 2008). The achievement of students is negatively correlated with the low SES level of parents because it hinders the individual in gaining access to sources and resources of learning (Duke, 2000; Eamon, 2005). Low SES level strongly affects the achievement of students, dragging them down to a lower level (Sander, 2001). This effect is most visible at the post-secondary level. It is also observed that the economically-disadvantaged parents are less able to afford the cost of education of their children at higher levels and consequently, they do not work at their fullest potential (Rouse & Barrow, 2006).

Krashen (2005) concluded that students whose parents are educated score higher on standardized tests than those whose parents were not educated. Again, he states that educated parents can better communicate with their children regarding the school work, activities and the information being taught at school. They can better assist their children in their work and participate at school. According to Roberts and Sampson (2011), students' academic accomplishments and activities, perceptions of their coping strategies and positive attributions, and background characteristics (i.e., family income, parents' level of education, guidance from parents and number of negative situations in the home) were indirectly related to their composite scores, through academic achievement in high school.

The students face a lot of problems in developing positive study attitudes and study habits. Guidance is one of the factors through which a student can improve his study attitudes and study habits and is directly proportional to academic achievement. Students who are properly guided by their parents have performed well in the exams. The guidance from the teacher also affects the student achievement. The guidance from the parents and the teachers indirectly affect the achievement of the students (Hussain, 2006).

Socio-economic factors like family income, and mother's and father's education, teacher-student ratio, the presence of trained teacher in school and sex of student affect the achievement of the students (Raychaudhuri, Debnath, Sen, & Majjumdar, 2010). According to Kernan, Bogart and Wheat (2011), academic success of a student will be enhanced if the optimal health-related barriers are low. A study by Zajacova, Lynch and Espenshade (2005) found that there is negative relationship between college credit and stress but weak relationship between GPA (Grade Point Average) and stress. Hijaz and Naqvi (2006) have also observed that there is a negative relationship between the family income and students' achievement and they focus on the private colleges in Pakistan.

Studies have also shown Income shocks do not only affect investment in children's education but also children's achievement. Again, when families are constrained by fewer resources, children's learning is consequently affected (Björkman-Nyqvist, 2013). According to Chukwudi (2013), children's test scores are lowest when poverty persists across the generations, and are highest when material advantage is long-lasting. Alisa found that the gap in attainment between children from the poorest and richest backgrounds

grew particularly fast during the school years. Yinusa and Akanle (2008), in their work, identified parental income in his work to be a cogent factor upon which the academic and vocational successes of secondary school students lie. They found parental income not to be sufficient to sustain the academic and personal social lives of the student in sub rural school areas.

This challenge, to a large extent, affects the psychological balance or homeostatic balance in the classroom, which causes low concentration, low perception, frustration, sickness and emotional disability in academic achievement of the school children. Therefore, when a child is deprived of the essential needs, he may be found to perform poorly in his school work. This is consistent with Bansal, Thind and Jaswal's (2006) finding that child welfare at school is a determinant of child retention and it incorporates the rights of children to adequate living standards (shelter, nutrition and healthcare, water, and sanitation services) that are vital for child growth and development.

Bansal et al., (2006) explained that in urban areas, most poor families can hardly afford the cost of water, resulting in children from poor families being sent on long treks in search of water, often leaving them to stand in long queues and they consequently being late or absent from school. Based on the study by Fetler (2001), education support by the family held positive relation to students' academic achievement significantly at .01, while according to Laeheem's (2007) study, education support of parents was positively related to students' academic achievement significantly at .001. However, parents held no statistically significant relation to students' achievement and low academic achievement might result from lack to consultation with parents (Kamwang, 2003).

Different studies have focused on parental encouragement and found positive and significant relationships with academic outcomes of their children (Codjoe, 2007; Murphy, 2009) whereas studies by Adetayo & Kiadese (2011) and Ghazi, Riasat, Saqib, & Hukamdad (2010) have focused on parental involvement and found positive and significant relationship with educational outcomes of their children. Muola (2010) has also demonstrated that parental encouragement had no relationship with academic achievement whereas Mau (2007) found that parental encouragement had a negative effect on academic achievement of the students. Several studies (Halawah, 2006; Yinusa & Akanle, 2008) have again focused on family structure and family environment as good determiners of academic success. Moula (2010) for instance, explored positive and significant relationship between home environments including parental encouragement with academic achievement.

Researchers emphasised on parental styles and confirmed significant and positive relationship of authoritative parenting style with academic success (Yinusa & Akanle, 2008; Kazmi, Muhammad, & Tahir, 2011). Murphy (2009) studied parental encouragement involving parental actions associated with parenting styles. Astone and Sara (2001) focused on parental practices involving parental involvement and parental encouragement; whereas Lakshmi and Arora (2006) focused on parental behaviour and found that parental acceptance and encouragement were positively related with academic achievement. Garikai (2010) confirmed a positive relationship of parental education with parental encouragement while Okpala, Okpala and Smith (2001) revealed that parental encouragement influenced cognitive development of their children whereas Kazmi et al., (2011) have found that

parental encouragement is significantly related to achievement motivation of the students.

Sharma and Tahira (2011) also investigated the influence of parental education, parental occupation and family size on science achievement of the secondary school students in Western Uttar Pradesh in India. 1,500 students were selected as a sample for the study and data was collected using a questionnaire that assessed personal information and science achievement test developed by the researchers themselves. The results indicated that family variables including parental education had significant relationship with the achievement of their children. Muola (2010) investigated the relationship between academic achievement motivation and home environment among standard eight pupils. The sample comprised 235 standard eight Kenyan pupils from six urban and rural primary schools from Machakos district. The results indicated a low but positive relationship (0.15) of parental education with academic achievement of the students and revealed a positive relationship between parental education and academic achievement of their children. Sunitha (2005) found that parental education was also found to have significant and positive relationship with academic achievements of the student. Tavani and Losh (2003) found that parental education had also positive relationship with achievement motivation of the students.

There is a range of factors that has effect on the quality of achievement of students (Waters & Marzano, 2006). A series of variables are to be considered when identifying the affecting factors towards quality of academic success. Identifying the most contributing variables in quality of academic achievement is a very complex and challenging job. The students in public

schools belong to a variety of backgrounds depending upon their demography. This diversity is much vast and complex as ever before in the Ghanaian culture. Keeping in view all these discussions, the present researcher conducted this study to examine the effects of home related- factors on the students' quality of academic achievement at the secondary school level in the Aboom Circuit of the Cape Coast Metropolis.

Student-Related Factors and Academic Achievement

Several pupils' characteristics have generally been identified as influences on their academic achievement. These include time with books and homework, attendance in school, pupils' attitude towards schooling, pupils' self-concept and motivation, intelligence, student competence, study habit, students' anxiety health and nutritional status of pupils.

Harb and El-Shaarawi (2006) found that the most important factor with positive effect on students' achievement is student's competence in English. If the students have strong communication skills and have a strong grip on English, it increases the achievement of the students. The achievement of the student is affected by communication skills; it is possible to see communication as a variable which may be positively related to achievement of the student in open learning. A major distinction of this study from previous studies is that it focuses on open learning (AL-Mutairi, 2011).

According to Pumipat (2005), students' academic achievement largely depends on motivation, study habits, anxiety, adjustment, responsibility and interaction between teachers/students. According to Chupinit's study (2007), students' study habits were accounted for a factor used to predict academic achievement of students. Paying attention in class was positively related to

academic achievement with the statistical significance at the level of .01. In the study of Kamwang (2003), study habits were positively related to academic achievement with statistical significance at the level of .001, and it can also be used to predict academic achievement statistically significant at .001.

According to the study by Kamwang (2003), poor academic achievement might result from irregular class attendance, lack of preparation before class, lack of class attention, lack of revision after class, and lack of class participation. Regarding interaction between instructors /students, it was found that interaction between instructors /students was positively related to academic achievement of students in Songkhla Province (Jankoop, 2008). Based on the study by Laeheem (2007), the interaction between instructors /students held a positive relation to students' academic achievement with the statistical significance at the level of .001, and the academic achievement could be predicted with the interaction between instructors /students significantly at .001.

Different researchers found positive and significant relationship between achievement motivation and academic achievement of the students. Researchers (Al-Shabatat, 2010; Ghazi et al., 2010; Manjuvani & Anuradha, 2011) have also found a positive relationship between motivation and academic achievement of the students whereas Sakiz, (2011) emphasized on achievement motivational goals, but Wang and Xing (2009) revealed no significant relationship of motivation goal with academic achievement of students. Singh and Parminder (2005) studied achievement motivation and found no relationship with academic achievement. Several studies (Ghazi et

al., 2011) have also studied achievement motivation of students and found that is the product of good home environment and parental encouragement.

Researchers such as Leeson, Ciarrochi and Heaven (2008) have studied cognitive ability and found positive relationship with academic achievement. Watkins (2007) emphasized on the importance of psychometric intelligence whereas (Wang & Xing, 2009) found no significant relationship intelligence and academic achievement of students. Adetayo and Kiadese, (2011) have examined emotional intelligence and found its significant relationship with academic success. Fahim (2007) for instance, showed that emotional, psychometric and verbal intelligence influence success, whereas Wu (2004) focused on personal intelligence and found academic intelligence, practical intelligence, creative intelligence and personal intelligence jointly related to success of students.

Razmjoo (2008) tested multiple intelligences and found their influence on academic achievement of students. Sharma et al., (2011) found that verbal and non-verbal intelligence of students are strong predictors of their academic achievement in different subjects. Froehlich (2007) found significant relationship between intelligence and achievement motivation of the students, whereas Jackson and Philippe (2006) found significant gender difference in cognitive ability and academic achievement. Verma and Gupta (2000) found that home environment contribute positively to verbal and non-verbal intelligence of the students.

According to Engin-Demir (2009), regardless of intelligence, students who spend more time on assignments and homework are very important activities to improve their grades. The amount of time students invests in

homeworks and other related activities have also been found to be strongly related to motivation. Etsey (2005) found homework to be a correlate of academic achievement. He stated that homework bore a positive relationship with learning outcomes when it is relevant to learning objectives, assigned regularly in reasonable amounts, well explained, motivational and collected and reviewed during class time and used as an occasion for feedback to students

For him, homework is in reality, an interaction between school and the home, and an essential ingredient of the educational process when measuring academic achievement (Alomar, 2006). Also, Stricker and Rock (2005) conducted an analysis by assessing the impact of the pupils's initial characteristics (gender, ethnicity, parental education, geographic region and age) and the academic achievement. They found that the students' initial characteristics have a modest impact on their academic achievement and among them parental education is the most significant. In addition, school attendance has a high correlation with individual academic achievement. The success of a pupil in school is predicated on regular school attendance.

According to Allen-Meares, Washington and Welsh (2000), poor attendance such as truancy or unexcused absence from school, cutting classes, tardiness, and leaving school without permission are seen as important in determining pupils' academics. Heady (2003) argued that there is a negative relationship between student academic achievement and work during school hours. As Akabayashi and Psacharopoulos (2009) found, that additional working hours decrease a child's reading and computational ability, whereas with additional hours of school attendance and study, the reading and

computational ability increases. From their findings, Ray and Lancaster (2003) concluded that time spent at work had negative impact on education variables with marginal impact weakening at higher levels of study hours and an unbalanced demand of work and education places a physical and mental strain on students and often leads to poor academic achievement.

McLean (2007) investigated the significant role of pupil attitudes towards learning with regard to their academic achievement. Pupils' attitudes such as absenteeism, truancy, indiscipline, etc can affect their achievement. For instance, McLean (2007) found that, by distinguishing between the attitudes of high and low achievers, five attitudinal factors were significantly related to academic achievement. Pupils' attitudes may therefore not only affect academic achievement directly, but also, it may indirectly influence the effect of other factors as well. In another study, Abu-Hilal (2000) found the effect of attitudes on student level of aspiration. Despite the difference between the findings of these two studies, the authors achieved consensus regarding the significance of attitudes in predicting achievements. Hassan (2002) further complemented the results of earlier studies, with the former proving that the pupil's initial attitude towards school was significantly related to academic achievement, while the latter found that attitudes predicted the pupil's basic approach to learning.

Among one of the personal variables most studied is self-concept, which concerns the group of thoughts and beliefs that a pupil has about his/her academic ability. Self-concept results from the pupil's internalisation of his social image. It is developed from different interactions with the social environments and agents. Great importance is assigned the pupils' self-image

and the acceptance or rejection by others (Diaz, 2003). This factor has also been investigated by several authors, as regards the relationship between self-concept and academic achievement. Marsh (2000) investigated the reciprocal relationship between self-concept and academic achievement and found that an individual's present achievement is affected by prior academic self-concept, and that grades had no effect on subsequent academic self-concept.

Similarly, Marsh and Yeung's (2007) study revealed that prior academic achievement did affect subsequent academic self-concept, and likewise, prior academic self-concept also affected subsequent achievement, with prior achievement being the control. Contrary to these results, Helmke and Van Aken (2005) found that elementary school achievement did not affect prior self-concept. Edwards (2002) found that self-concept better predicts achievement than variables such as age or student gender. Another personal variable most studied is motivation. Motivation is considered to be the element that initiates the pupil's own involvement in learning. When a student is strongly motivated, all his efforts and attention are directed towards the achievement of a specific goal, thus bringing to bear all his or her resources (Diaz, 2003).

In relation, students' academic achievement motivation is influenced by the students' perception of parental support and involvement. If students' perception is positive on their parents support and involvement, they will achieve well (Wang & Wildman, 2005). Gottfried (2004) also revealed that parental motivational practices have significant direct effects on academic intrinsic motivation, and indirect effects on subsequent motivation and achievement. According to Engin-Demir (2009), students' perceptions that

their parents are involved and interested in their schooling and that they encourage them to do well are positively related to academic achievement. Through their involvement, parents convey the message that school is important and provide their children with positive emotional experiences in relation to school. Fuchs and Woessmann (2004) observed that students performed significantly worse in Reading, Mathematics and Science in schools whose principals reported that learning was strongly hindered by the lack of parental support. However, some researches have shown most aspects of the relationship between educational support of parents and scholastic achievement of children to be negative.

Other studies have looked at children's nutritional and health status on school indicators such as classroom concentration, general intelligence and achievement on selected cognitive tasks including achievement test scores (Pridmore, 2007). Research by the Ghana National Commission on Children ([GNCC], 2000) found that in total, a little over 16 per cent of school-aged children surveyed, suffered recurring health problems such as headache, malaria/fever, stomach disorder and other ailments. Research by Fentiman, Hall and Bundy (2001) in the Eastern Region, revealed that 70 per cent of all primary school-age children were anaemic. Sarris and Shams (2001) studied malnutrition among school age children in Ghana and found that about 36 per cent of children surveyed were malnourished. Most weighed below the 80 percent Harvard weight-for-age standard. The GNCC survey (2000) also reported that only about a third (29%) of children ate meals with protein. The research indicates that in general, malnutrition is higher in Northern Ghana (Sarris & Shams, 2001), where socio-economic indicators are low. In these

regions, enrolment, attendance, completion rates and achievement tend to be lower.

Health has the potential to affect access to schooling. Research indicates a child's health can be influenced when and whether they go to school, their functioning in school and how long they are expected to stay in school. Research in Ghana indicates a correlation between malnutrition, stunted growth and delayed enrolment in school (Fentiman, Hall, & Bundy, 2001; Glewwe & Jacoby, 2005). A child's health status affects how the child functions at school. Children who suffer malnutrition, hunger, or those who lack certain micronutrients do not have the same potential for learning as healthy and well-nourished children (Pridmore, 2007).

Harbison and Hanushek (2002) found a statistically significant relationship between health and nutritional indicators and academic achievement. They concluded that the influence of poor health and nutritional status on achievement begins early in a child's life and have cumulative impact on pupil's achievement. Vegas and Petrow (2008) assert that although the mechanisms by which malnutrition affects academic achievement are not known, deficiencies in proteins, calories and micronutrients are believed to impair cognitive development. Lockheed and Verspoor (2001) indicate three aspects of nutritional status that affect academic achievement adversely: temporary hunger, micronutrient deprivation and protein-energy malnutrition.

Gender and Academic Achievement

The relationship between gender and the academic achievement of students has been discussed in the last decade (Eitle, 2005). A gap between the achievement of boys and girls has been found, with girls showing better

achievement than boys in certain instances (Chambers & Schreiber, 2004). Gender, ethnicity, and father's occupation are significant contributors to student achievement (McCoy, 2005). Different researches found significant differences in academic achievement of male and female students (Umunadi, 2009; Sarsani & Ravi, 2010; Asthana, 2011). Researchers (Naderi et al., 2009; Singh & Parveen, 2010) found no gender difference in educational achievement of students.

Asthana (2011) conducted a study on a sample of 300 students consisting 150 male and 150 female students of secondary education from Varanasi, with a view to assess the gender difference in scholastic achievement. Scholastic achievement was measured on the basis of an average of marks obtained in three previous annual examinations. The findings revealed that there was a significant difference in academic achievement of male and female students. Girls were found to be better performers than boys. Bahago (2011) investigated the influence of achievement motivation and demographic characteristics on academic achievement of nomadic Fulani girls in Adamawa State. The data were collected from a sample of 300 girls selected from nomadic primary schools, by administering achievement motivation rating scale and nomadic girl' achievement test. The results indicated that academic achievement of the girls was influenced by parental education levels. The findings revealed the relevance of parental education in academic achievement of the girls.

Garikai (2010) empirically predicted the causes of poor academic achievement of the school students on a sample of 200 high school students of Zimbabwe. The data was gathered through interview conducted with the

students. The findings indicated that there was a difference in academic achievement of male and female students with male students performing better and education of parents had significant effect on academic achievement of the students. Sarsani and Ravi (2010) investigated achievement in mathematics of secondary school students in relation to selected variables. The sample of the study consisted of 480 boys and girls, drawn from the various private and government high school of Warangal city in Andhra Pradesh. Data was collected by administering scholastic achievement test of mathematics to the sample. The findings indicated significant difference between the mathematics scholastic achievement of the boys and girls. The result also showed that girls were higher achievers than boys.

Umunadi (2009) explored the relationship between the male and female students' academic achievement in the subject of television on a sample of 731 students from urban and rural technical colleges in Delta State of Nigeria. The results of board examinations revealed that males performed better than their female counterparts. It was also revealed that urban students performed better than their rural counterparts. Chaturvedi (2009) investigated the effect of school environment and certain demographic variables on achievement motivation and academic achievement of young adolescents. The respondents of the study were 300 students within the age range of 12-15 years. Percentages of marks obtained by the students in last three years were used as measures of academic achievement. The results indicated significant gender difference in academic achievement; the girls scored significantly higher marks than boys. Leeson et al. (2008) examined cognitive ability, personality and academic achievement on a sample of 639 high school

students of New South Wales, Australia. The results showed significant gender difference in academic achievement. The findings also indicated that girls performed better than boys. The results revealed that gender plays a unique role in predicting academic achievement.

Tella (2007) investigated the impact of motivation on academic achievement in Mathematics. The participants of the study were 450 secondary school students of both sexes drawn from ten schools of Ibadan. The was collected by employing achievement test in Mathematics as a measure of academic achievement. The results revealed significant differences in the academic achievement of male and female students in Mathematics. Male students were found to have better achievement in Mathematics. Bruni et al. (2006) explored the relationships among academic achievement, demographic and psychological factors. On the sample of 380 school students of Italy, a school achievement index was used as an instrument to measure their academic achievement. The findings of the study indicated significant differences in academic achievement of male and female students. Female students were found to have higher academic achievement than males.

However, different researchers found different results. Singh and Praveen (2010) studied the relationship of social maturity with academic achievement of high school students. The study was conducted with a sample of 400 high school students consisting 200 boys and 200 girls studying in tenth class of New Delhi. The aggregate scores of the selected students in the board examinations were taken as the measures of academic achievement. The results indicated that there were no significant differences between the academic achievement of boys and girls. The findings also revealed no

significant difference in academic achievement of rural and urban students. Naderi et al., (2009) investigated the relationship among intelligence, creativity, self-esteem and academic achievement of a sample of 153 Iranian undergraduate students in Malaysian universities. Cumulative grade point average scores were taken as measures of academic achievement. The findings showed no significant gender difference in academic achievement of the students.

Naderi et al., (2008) carried out a study with 153 undergraduates of Malaysian University to infer whether intelligence and gender as predictors of academic achievement. Cumulative grade point average scores were taken as measures of academic achievement. The results indicated that there was no significant difference between the academic achievement of male and female students. Navarrete et al., (2007) carried out a study on culture and achievement motivation in Latino and Anglo American high school students of USA on a sample of 149 students from the high school districts in California. The data was collected by administering culture value orientation and attribution-emotion scale to the sample and grade point average was taken as academic achievement measures of the students. Socio-economic status and education of the parents had been found to influence academic achievement of the students of both the cultures.

Conceptual Framework

This section proposes a conceptual framework within which the concept, academic achievement is treated in this work. The selection of the model is based on the belief that, the quality of input invariably affects quality of output in this case, academic achievement (Acato 2006). Figure 2 shows the

linkage between different factors and academic achievement. It shows that academic achievement as a dependent variable is related to the independent variables, which are school-related factors, teacher-related factor, home-related factor, students-personal factors. Figure 2 shows that school-related factors are linked to academic achievement. If the school related factors are favourable, then the academic achievement of students is likely to be favourable and if school-related factors are unfavourable, then academic achievement may be low.

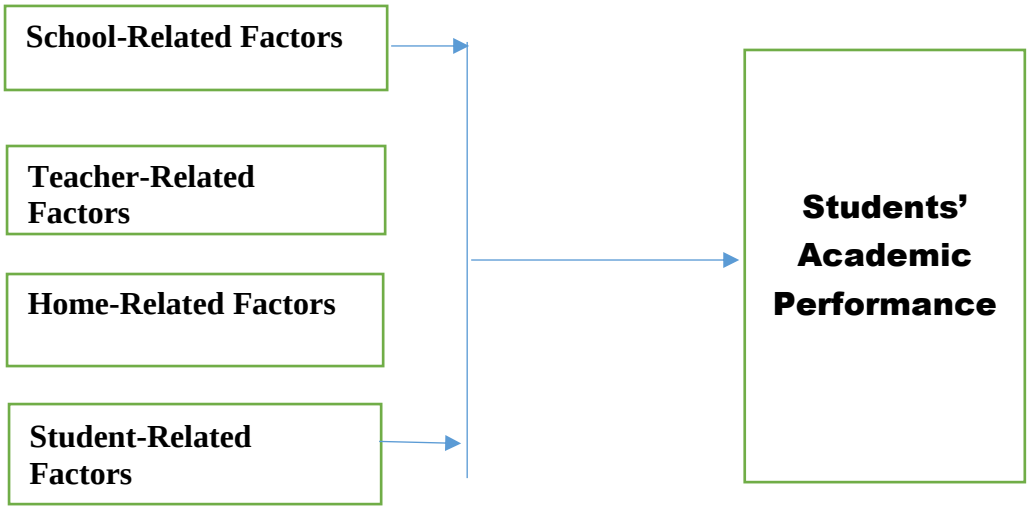

Figure 2: Factors contributing to students' academic achievement

Source: Author's own construct (2016)

This argument is supported by several researchers (Geiser & Santelics (2007; Staffolani & Bratti (2002) whose studies showed that previous achievement affects future achievement. The second independent variable is teachers' related factors, which was conceptualized as qualification, teaching experience, age, competence and knowledge is linked to academic achievement of students. That is the type of teachers related factor is likely to

contribute to students' academic achievement of the student in future. An argument supported by (Considine & Zappala, 2002; Sentamu, 2003).

Home-related factors, which are conceptualized as parents' socio-economic status (parents' education, parents' income and parents' occupation), are linked to academic achievement. The Figure 2 shows that academic achievement is dependent on parents' social economic status. That is, students from high social economic backgrounds will perform better than their counter parts from low social economic backgrounds as discussed. This is supported by Owen (2009).

Summary of Literature Review

In conclusion, this chapter reviewed related works to the present study. The works reviewed include those on school environment, home related, student characteristics and teacher factors responsible for poor academic achievement. However, the literature reviewed does not address the questions raised by this research in the study. Knowledge on factors causing low academic achievement in the study is limited. Information on variables causing the low academic achievement in the basic level education in the Aboom Circuit of the Cape Coast Metropolis is pertinent to help stakeholders to develop strategies for improving academic achievement of students. This gap demonstrates a need for further study on this topic.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter discusses the methodology used for the research. It presents the research design, study population, sample and sampling procedure, data collection instruments, data collection procedure and data processing and analysis.

Research Design

The present study was an investigation of factors contributing to the academic achievements of students in the Aboom Circuit of the Cape Coast Metropolis during 2015/2016 academic year. The study employed a descriptive, cross-sectional survey design. The descriptive method was used to identify and describe the factors that affect the academic achievement of pupils of low-SES. The descriptive design was used examine out whether there was a relationship between the home, pupil, teacher, and school related-factors and pupil's academic achievement. The design was considered suitable for the study as it involves gathering of data from members of the population in order to determine its current status in regard to one or more variables (Mugenda & Mugenda, 2009).

According to Fraenkel and Wallen (2008), a cross-sectional research describes an existing relationship between variables. It is also encouraged for studies that involve collecting data from a large population. Furthermore, descriptive studies are concerned with gathering facts rather than manipulation

of variables (Charles & Merton, 2002). In this regard, the descriptive and the cross-sectional survey design was considered appropriate as a means of achieving the main objective of the study which was to establish the factors contributing to the high academic achievements of students in the Aboom Circuit of the Cape Coast Metropolis.

Study Population

The population for the study comprised all JHS students and teachers in the Aboom Circuit of the Cape Coast Metropolis. Records from the Ghana Education Service (GES) indicated that there are 10 JHS in the circuit (Cape Coast Metropolitan Education Directorate [CCMED], 2015). The accessible population, however, comprised all JHS students and teachers from the five selected schools in the Aboom Circuit namely: St Nicholas, St. Monica, Aboom Methodist B, Aboom Zion A and Aboom Zion C. The total population of the students and teachers from the five selected schools were 859 and 30 respectively, according Cape Coast Metropolitan Education Directorate [CCMED], 2015) (see Table 1). This population was chosen for the study because it was a mixed school population and was easy to access in terms of proximity and transportation to make the collection of data easy to the researcher. Also, the necessary character traits of the behaviour and attitude and all the components of a complete community could easily be found in these school settings.

Sample and Sampling Procedures

The sample frame for the study was all students and teachers in the five selected JHS of the Aboom Circuit of the Cape Coast Metropolis. The sample size for the study was 350 for students and 30 for teachers. The sample

size for students from the five selected schools was determined by using Krejcie and Morgan (1970) sampling table. According to Frankael and Wallen (2008), a sample size of a minimum of one hundred (100) was enough to give a meaningful generalization. Hence, a sample of three hundred and fifty (350) students' was good for a meaningful generalization. The five junior high schools (St Nicholas, St. Monica, Aboom Methodist B, Aboom Zion A and Aboom Zion C) were randomly selected from the ten schools in the circuit. A proportional allocation was used to determine and allocate the total number of students from the population to each school. The proportional allocation method was used because the distribution of students in the schools was not even, and thus the method ensured students selected from each school reflected the total number of students in the population of each school (See Table 1).

Table 1: Sample Distribution

Name of Schools	Student Population	Student Sample	Teacher Population	Teacher Sample
St. Nicholas JHS	167	68	6	6
St. Monica JHS	367	150	6	6
Aboom Methodist B JHS	107	44	6	6
Aboom Zion B JHS	115	47	6	6
Aboom Zion C JHS	103	42	6	6
Total	859	350	30	30

Source: Field data, 2016

The student respondents from each school were selected using simple random sampling techniques, specifically the lottery method. The researcher made use of the school register in order to get the total number of students

from each class. From the school register, the male and female names were segregated and coded, and each code was matched with a particular gender. The names were then written on pieces of paper and the papers were folded and put into a container. This was done separately for each school. The folded paper slips were mixed thoroughly and a number of slips were picked at random. Picking was done by students until the required number for students from each school was obtained. In all, a sample of 350 students was selected for the study. This technique was used in order to give students equal chances of being selected and to help avoid biases in the selection of the respondents. Again, a census method was used in selecting the teachers for the study. The census method was used because the teachers were few, so all of them were included in the study.

Data Collection Instrument

Two sets of self-developed questionnaires were used in the data collection. The questionnaires were designed for both school teachers and students and they related to factors which might be affecting students' academic achievement in the school. Both teacher and student questionnaires were organised in two sections (A and B) (see Appendix A). Section A dealt with the demographic profile of the respondents, while Section B contained items relating to school environment factors, teachers' related factors, home-related factors and student-personal factors. The items in the questionnaires were structured in such a way that they enabled the respondents to pick alternative answers against their choice of responses. The questionnaires included only close-ended questions. The questionnaires were again developed using four-point, Likert-type Scale ranging from 1 = strongly disagree (SD), 2

= disagree (D), 3 = Agree (A) and 4 = strongly Agree (SA). On this scale, the highest mean score possible was 4 and the lowest mean score possible was 1. The midpoint between these two extreme scores was 1.50 which was arrived at thus: $\frac{4-1}{2} = \frac{3}{2} = 1.50$. Hence, the cut-off point for deciding whether the teacher or students related factor was high or low was 4 – 1.50 or 1 + 1.50, which in either case is 2.50. Therefore, any item having a teacher or students related factor mean score of 2.50 or higher was regarded as high teacher or students related factor. On the other hand, any item having a teacher or students related factor mean score of less than 2.50 was regarded as low teacher or students related factor. The same process was used to determine the home related factors and school related factors.

Cohen, Manion and Morrison (2007) observed that the questionnaire tends to be more reliable since its anonymity encourages greater honesty than interview. The questionnaire might have some demerits such as respondents not necessarily reporting their beliefs and attitude to portray them in good light, as well as data being affected by the respondents' knowledge, experience and motivation; yet, it is a good instrument to be used. Cohen et al (2007) specify that questionnaire provides a relatively simple and straightforward approach to the study of attitudes, values, beliefs and motives. It may also be adapted to collect generalised information from any human population. They add that, questionnaires also have high amounts of data standardisation. It was against these merits that the researcher opted to use questionnaires to elicit response from the subjects for the study.

Students' Academic Achievement

The third-term results of 2015/2016 academic year of students in core subjects (Mathematics, English Language and Integrated Science) from each school formed the dependent variable. The data included students' class exercise, class tests, homeworks and terminal exams. The average of students' achievement in the core subjects was computed and it was scaled as 1=low achievement (0-49) 2=moderate achievement (50-74), and 3=high (75-100). This was determined by me by putting the class scores into three different groups. Data on students' academic achievement which was a dependent variable was used to correlate with other independent variables such as students' factors, teacher factor and home factor. It was also used as a criterion variable to establish which predictor variables predicted it.

Pre-Testing of Instrument

A pre-test of the instrument was conducted to ascertain any need for revisions of the question. A pre-test of the research instrument was carried out in two selected JHS (St Augustine College and Aggrey Memorial JHS) in Cape Coast Metropolis. The pre-test involved an administration of the questionnaires to 15 teachers and 50 pupils. The participants of the pre-test were asked to complete the questionnaires and to provide comments or suggestions for revising any ambiguous items. The final instruments for the study (Appendix A) were produced after subsequent revisions in the wording of a few items on the pre-test instrument were done.

Validity and Reliability of Instrument

Validity is a measure of how well a test measures what it is supposed to measure. Validity is the accuracy and meaningfulness of inferences which

are based on the research. Assessment of content and construct validity was achieved by the use of non-statistical approaches including peer and/or expert review and pilot testing was involved (Fraenkel & Wallen, 2008). The pilot testing was done in two schools and it helped in achieving validity as it resulted in correcting and appropriately adjusting areas of weakness in relation to the topic under study. The supervisors of the thesis were also involved in scrutinizing the questionnaire to ensure both face and content validity.

Reliability is defined as a measure of how consistent the results from the test are. It is a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2009). A reliable instrument is one that produces consistent results when used more than once in the process of data collection. The reliability of the instruments was determined using Cronbach's alpha analysis. Cronbach's coefficient alpha values of 0.74 and 0.79 were obtained for pupils and teachers questionnaires respectively. Cronbach's alpha as an estimate of reliability was adequate at 0.74 and 0.79. Such reliability values, according to researchers (Cohen et al., 2007; Fraenkel & Wallen, 2008), were fair indications of a good internal consistency, and the researcher thus concluded that the instruments were adequately reliable.

Ethical Consideration

Ethical clearance was received from Institutional Review Board in the University of Cape Coast (See Appendix D). The purpose of the study, the need for individual participation, anonymity as well as confidentially of respondents' responses were spelt out. Informed consent was sought from participants by explaining the purpose of the study to them.

Anonymity of respondents was highly considered in the study. This gave the participants the opportunity to have their identity concealed. Neither names nor any identifiable information from respondents were taken.

On the issue of confidentiality, effort was made to maintain confidentiality of the responses of the participants. Participants were told that their responses would be kept confidential and that no one known to them would have access to the information provided.

Data Collection Procedures

Since the study involves human beings, the ethical principle was followed during data collection. The data were collected in two weeks, from 3rd to 18th October, 2016. Before the study was conducted, a research proposal of the study was approved by the Department of Educational and Psychology of Faculty of Educational Foundations, sof the College of Education Studies. Prior to the data collection, I also obtained an ethical clearance from the Institutional Review Board (IRB) of the University of Cape Coast and also presented copies of an introductory letter from the Department of Educational Foundations (Appendix B) to seek permission from the selected institutions to undertake the study. With the introductory letter, I also sought permission from the various heads of the schools to conduct the study in their schools. The purpose of the introductory letter was to solicit for cooperation and also to create a rapport between the researcher and the respondents who served as the key participants of the study.

Also, I obtained consent from the school head teachers before administering the questionnaire to the teachers and the students. In doing so, a consent statement was read out to each participant for acceptance before the questionnaires were administered. For teachers, the researcher obtained

informed verbal consent from them before the questionnaires were administered. The participants were made aware that their participation was voluntary, and that they were free to withdraw from partaking in the study anytime. Efforts were made to maintain confidentiality of the responses. Participants were told that their responses would be kept confidential and that no one known to them would have access to the information provided and none of the respondent's name was recorded. Additionally, the questionnaires were packed in an envelope and kept in a cabinet to prevent any losses. The researcher self-administered the questionnaires to the students and teachers and each of them took about 10-20 minutes in filling the questionnaires. The questionnaires were retrieved on the day of administration and the return rate was 100%.

Data Processing and Analysis Procedures

The copies of the questionnaire returned were collected and checked for completeness and accuracy. The data were entered in a pre-designed template in the Statistical Package for Social Science (SPSS) software, version 21. The data were analysed using descriptive (frequency and percentages, mean and standard deviation) and inferential statistics (correlation, multiple regression). Research questions 1-4 were analysed using mean and standard deviation. Hypotheses 1-4 were analysed using Pearson Product Moment Correlation and hypothesis 5 was analysed using multiple regression. Before hypotheses were tested, data on the independent variable such as home related-factors, school-related, personal-related factors and teacher-related factors were all transformed from nominal state to interval scale of measurement. All the hypotheses were tested at 0.05 level of significance.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The present chapter deals with the presentation, interpretation and discussion of the results based on the research questions and hypotheses. This is done in three sections: the first section presents descriptive statistics of the demographic characteristics of the respondents. The second presents the results in response to the research questions and the third part presents the results from the research hypotheses. The results are presented in tables, to enhance clarity

Socio-Demographic Characteristics of the Respondents

The background data of the teachers and students were sought. The information elicited relate to sex, age distribution, teachers' educational qualification, and teachers teaching experience, students' classes/forms, and students living status. The background data of respondents formed no part of the main analysis. The purpose for the inclusion of background data of respondents was to have idea about the general information of respondents but not for main analysis. The results are discussed using frequency and percentages and presented in Table 2 and 3.

Table 2 shows the results of teachers' demographic characteristics. Concerning teachers' sex distribution, it was found that out of 30 teachers, a majority (53.3%) were males while (46.7%) of them were females. These results indicated suggest that the male teachers were more than the female

teachers. The age distribution of teachers ranges from below 25 years to above 40 years. It was found that out of 30 teachers, (26.7%) of them fell within the age brackets of 35-39 years. This was followed by (20.3%) apiece of the teachers who were found to be in the age group of 30-34 years and 25-29 years.

Table 2: Teachers' Demographic Information

Variables	Sub-scale	Frequency	Percentages (%)
		(N=30)	
Sex of respondents	Male	16	53.3
	Female	14	46.7
Age Distribution	Below 25 years	5	16.7
	25-29 years	6	20.0
	30-34 years	6	20.0
	35-39 years	8	26.6
	Above 40 years	5	16.7
Educational Qualification	Diploma/ HND	7	23.4
	Bachelors' degree	19	63.3
	Masters' degree	4	13.3
Teaching Experience	1-5 years	5	16.7
	6-10 years	10	33.3
	11-15 years	9	30.0
	16-20 years	6	20.0

Source: Field data, 2016

Table 2 shows that (53.3%) of the teachers were males while (46.7%) were females. It was found that (26.6%) of the teachers were between 35 to 39 years. This was followed by (20.0%) of the teachers who were between 25 to 29 years and 30 to 34 years respectively and (16.7%) were below 25 years and above 40 years respectively.

It was also observed that (63.3%) of the teachers were Bachelor's Degree holders, (23.3%) of them were Diploma or HND holders (13.3%) of them held Master's Degree. It could be concluded that virtually all the teachers were mature in terms of age and they were professionals who had much experience. From Table 2, it was found that out of 30 teachers, 33.3% and 30% of them had been teaching for about 6-10 years and 11-15 years respectively and 20% of them had taught for about 16-20 years. It could be said that the majority of the teachers (about 83.3%) had experience in the teaching profession and they could indicate the factors contributing to academic achievement among students.

Table 3- *Students' Demographic Information*

Variables	Sub-scale	Frequency	Percentages (%)
		(n=347)	
Sex of respondents	Male	181	52.2
	Female	166	47.8
Age Distribution	10-13 years	61	17.6
	14-16 years	182	52.4
	17-19 years	104	30.0
Class level/Forms	Form 1	115	33.1
	Form 2	113	32.6
	Form 3	119	34.3
Living	Both parents	193	55.6
	Only one parent	95	27.4
	Family relatives	59	17.0

Source: Field data, 2016

Table 3 gives the students' background information. It was observed that out of 347 students, a majority (n=181; 52.2%) were males while 166 (47.8%) were females. This suggests that the male students were more than

their female counterparts. The majority (n=182; 52.4%) of the students were within the age group of 14-16 years while 104 of them representing 30% were found to be in the age group of 17-19 years. It was found that the majority 193, (55.6%) of the students were living with their parents (both mother and father).

Answers to Research Questions

Research Question 1: What are the school-related factors that contribute to the academic achievement of low socio-economic (SES) JHS students in the Aboom Circuit?

The main objective of this research question was to explore the view of teachers and students concerning school-related factors that contribute to academic achievement of low-SES JHS students. On a four-point, Likert-type scale (1 = strongly disagree, 2 = disagree, 3=agree, and 4 = strongly agree), both teachers and students were asked to indicate their levels of agreement or disagreement with statements posed by the researcher on the school-related factors. The results were discussed using means and standard deviation. *A mean of 2.50 and above indicates respondents' agreement with the factors while a mean of 2.49 and below indicates respondents' disagreement with the factors*. The results are presented in Table 4.

Table 4: School-Related Factors that Contribute to the Students' Academic Achievement

Statements	Teachers (n=30)		Students (n=347)	
	Mean	SD	Mean	SD
1. The school time schedule is followed by the teachers.	3.27	0.87	3.43	0.76
2. There are school programmes that help students to learn.	3.10	0.80	3.34	0.80
3. There are available library references in the school.	2.43	0.97	2.26	1.08
4. Classroom is comfortable enough for teaching and learning	2.80	0.78	3.33	0.86
5. There is enough space in the library for learning	1.83	0.79	2.01	1.04
6. The school has adequate textbooks for all the subjects in the library	2.30	0.99	2.41	1.12
7. The school has adequate facilities for teaching and learning.	2.43	0.82	2.34	1.01
8. In my class, the students are too many.	2.53	1.01	2.82	1.06
9. The school compound is clean and orderly for learning.	2.97	0.85	3.31	0.82
10. The school provides guidance counselling to all students	2.93	0.94	3.29	1.05
11. The school ensures that all parents attend school meetings	2.57	1.10	3.40	0.82
Mean of Means/ SD	2.65	0.90	2.90	0.95

Source: Field data, 2016

Table 4 shows the results of the respondents' (both teachers' and students') views on school-related factors that contribute to academic achievement of students of low SES. It is obvious from the results that the

majority of the respondents agree with the statements concerning school related factors. For example, it was realized that both teachers (M=3.27; SD=0.87) and students (M=3.43; SD=0.76) strongly agreed with the statement that the school time schedule was followed by the teachers. The results suggest the school time schedule for teaching and learning (productivity) was being followed by the teachers, administrators and students in the schools.

From Table 4, concerning the statement, "There are school programmes that help students to learn", it was observed that the majority of the teachers (M=3.10; SD=0.80) and students (M=3.34; SD=0.80) strongly agreed. This result indicates that the schools had educative programmes that facilitated student learning. It was found that both teachers and students (M=2.80; SD=0.78; M= 3.33; SD=0.86) strongly agreed with the statement that classrooms were comfortable enough for teaching and learning. It was revealed that both the teachers (M=2.97; SD=0.85) and students (M=3.31; SD=0.82) indicated that the school compound or environment was cleaned and conducive for learning. Also, both teachers (M=2.53; SD=1.01) and students (M=2.82; SD=1.06) agreed with the statement that the students were too many in the class. These results imply that both classroom and school environment and climate could contribute to students' academic achievement.

As evident in Table 4, both teachers (M=2.43; SD=0.97) and students (M=2.26; SD=1.08) disagreed with the statement that there were available library references in the school. This result implies that books in library for references were not available for teaching and learning in the schools. Data on the statement "There is enough space in the library for learning", showed that both teachers (M=1.83; SD=0.79) and students (M=2.01; SD=1.04) disagreed

with the statement. Again, as regards the statement, "The school has adequate textbooks for all the subjects in the library", it was realized that both teachers (M=2.30; SD=0.99) and students (M=2.41; SD=1.12) disagreed with the statement. Similarly, with reference to the statement "The school has adequate material resources and facilities for teaching and learning", it was found that both teachers (M=2.43; SD=0.82) and students (M=2.34; SD=1.01) disagreed with the notion. These results show that textbooks and other teaching and learning materials were not adequately available in the schools. This is believed to contribute negatively to students' academic achievement.

As shown in Table 4, it was found that the majority of the teachers (M=2.93; SD=0.94) and students (M=3.29; SD=1.05) agreed with the statement that the school provides guidance and counselling to all students. This result means that the school provides guidance and counselling services to all students and it is believed that this would significantly contribute to students' academic achievement. To the statement "The school ensures that all parents attends school meetings", it was found that both teachers (M=2.57; SD=1.10) and students (M=3.40; SD=0.82) strongly agreed to the statement. This result suggests that there is a strong and positive school-parent relation. This is a significant factor that may contribute to students' academic achievement.

From these results, it is concluded that on the average, both teachers (MM=2.65; SD=0.90) and students (MM=2.90; SD=0.95) agreed with the statements concerning school-related factors that contribute to students' academic achievement. Teachers and students indicated that school-related factors such as school time schedule, resources, school climate, guidance and

counselling, school-parents relationship may significantly contribute to students' academic achievement. This result suggests that both teachers and students had positive view concerning school-related factors and it is deduced that these factors would significantly contribute to students' academic achievement.

These results confirm the findings of Alos, Caranto and David (2015) who asserted that among the school-related factors, unqualified and poorly trained teachers, inadequate facilities, and dilapidated instructional materials significantly affects students' academic achievement. These results are also consistent with the finding of Karemera (2003), who found that students' achievement is significantly correlated with satisfaction with academic environment and the facilities such as library and computer lab in the institution. The academic environment is the effective variable for students and it has positive relationship with fathers' education and grade level (Kirmani & Siddiquah, 2008). This finding also supports that of Sparkles (2009) whose findings showed that school environment and teachers' expectations from their students also have strong influence on student achievement. This is consistent with the present study's findings that availability of school programmes, library reference books, and comfortable classrooms were all deemed to have impact on the students' academic achievement.

These results were in line with the findings of Kwesiga (2002), who concluded that the number of facilities a school offers usually determines the quality of the school, which in turn, affects the achievement and accomplishment of its students as positive school environment affects

students' academic achievement. Also, strict regulations, overloaded assignments, severe punishment measures, influence of irresponsible friends, accommodation in poor surrounding (Sommai, 2008) can affect students' academic achievement. Instructional materials provide information, organise the scope and sequence of the information presented, and provide opportunities for pupils to use what they have learnt. Students usually perform better when they have books or study aids to foster their learning. These study aids or material resources could be textbooks, teachers' guides, wall pictures, maps, atlases and other learning aids. The availability and use of teaching and learning materials affects the effectiveness of a teacher's lessons (Lockheed & Verspoor, 2001). These results were in agreement with the findings of Harbison and Hanushek (2002), who conclude that the quality of the physical facilities is positively related to student achievement. Similarly, they found that the entire unattractive physical structure of the school building could de-motivate learners to achieve academically.

Class sizes have also been identified as determinants of academic achievement. Studies have indicated that schools with smaller class sizes perform better academically, than schools with larger class sizes. These results confirmed the findings of Fabunmi et al. (2007) who revealed that class size, student classroom space and class utilization rate determined significantly students' academic achievement. Similarly, Naseer and Muhammad (2007) found a significant correlation between school size and student achievement. They revealed that small schools performed better than medium and large schools. Kraft (2004), in his study of the ideal class size and its effects on teaching and learning in Ghana, concluded that class sizes above 40 have

negative effects on students' achievement. Adeyela (2000) also found that large class sizes are unconducive for serious academic work.

Research Question 2: What are the teacher-related factors that contribute to the academic achievement of low-SES JHS students in the Aboom Circuit?

The main objective of this research question was to assess the view of teachers and students concerning teacher-related factors that contribute to academic achievement of low SES JHS students. On a four-point Likert scale (1 = strongly disagree, 2 = disagree, 3=agree, and 4 = strongly agree), both teachers and students were asked to indicate their levels of agreement or disagreement with statements posed by the researcher on teacher related factors. The results were discussed using means and standard deviation. *A mean of 2.50 and above indicates respondents' agreement with the factors while a mean of 2.49 and below indicates respondents' disagreement with the factors*. The results are presented in Table 5.

Table 5: Teacher-Related Factors that Contribute to the Students' Academic Achievement

Statements	Teachers (n=30)		Students (n=347)	
	Mean	SD	Mean	SD
1. The teachers have more knowledge (mastery) on the subjects	3.17	0.81	3.74	0.54
2. The teachers use different methods and strategies for teaching	3.20	0.72	3.49	0.68
3. The teachers teach so many topics in a short period of time	1.63	1.15	2.14	1.03
4. The teachers give relevant examples to support what they are teaching at particular time	3.33	0.66	3.51	0.64
5. The teachers use different	2.93	0.89	2.80	0.87

	materials/resources (both audio-visual) aids in teaching				
6.	The teachers provide different teaching and learning activities in a particular lesson	3.33	0.66	3.05	0.81
7.	The teachers always criticise students and put them to shame	1.73	1.09	1.96	1.11
8.	The teachers are frequently absent from class or are late to class	1.27	1.22	1.71	1.19
9.	The teachers create a warm classroom environment where students are comfortable asking questions	3.33	0.64	3.10	0.76
10.	The teachers make classes enjoyable and interesting.	3.30	0.69	3.59	0.62
11.	The teachers help students to understand issues after normal classes	3.07	0.87	3.41	0.71
	Mean of Means/SD	2.75	0.86	2.96	0.82

Source: Field data, 2016

Table 5 shows the results of the teachers and students concerning their views on teacher-related factors that contribute to academic achievement of JHS students of low SES in the Aboom Circuit. From Table 5, it is clear that both teachers and students were in agreement with the statements pertaining to the teacher-related factors. For example, a majority of the teachers (M=3.33; SD=0.64) and students (M=3.10; SD=0.76) strongly agreed with the statement, "The teachers created a warm classroom environment where students are comfortable asking questions". This result suggests both teachers and students indicated that the teachers create conducive and positive classroom atmosphere and climate for effective teaching and learning. It is

believed that positive classroom atmosphere and climate would positively contribute to students' academic achievement in the Aboom Circuit.

As seen in Table 5, with regards to the statement, "The teachers provide different teaching and learning activities in a particular lesson", it was found that both teachers (M=3.33; SD=0.66) and students (M=3.05; SD=0.81) strongly agreed with the notion. This result also infers that both teachers and students indicated that the teachers used several teaching activities to facilitate their lessons. Concerning the statement, "The teachers give relevant examples to support what they are teaching at particular time", it was noted that both teachers (M=3.33; SD=0.66) and students (M=3.51; SD=0.64) strongly agreed with the statement. This result further implies that teachers used relevant examples in relation to a particularly lesson. It is believed that effective teaching and learning activities and relevant examples during instructional process are significant teacher-related factors that would positively affect students' academic achievement.

From Table 5, it was realized that both teachers (M=3.30; SD=0.69) and students (M=3.59; SD=0.62) strongly agreed with the statement that the teachers made classes enjoyable and interesting. This result suggests that the teachers motivated, attracted and sustained the interest of the students during instructional processes. When students are motivated and they have keen interest and are satisfied with the instructional process, it is believed that their academic achievements would significantly improve and be enhanced.

As evident in Table 5, the majority of the teachers (M=3.20; SD=0.72) and the students (M=3.49; SD=0.68) strongly agreed with the statement that "The teachers used different methods and strategies for teaching". This result

implies that both teachers and students indicated that the teachers used several teaching methods to attract, motivate, and sustain the interest of the students during instructional process. Thus, teacher pedagogy was a significant factor that determined and influenced students' academic achievement. Correspondingly, regarding the statement, "The teachers have more knowledge (mastery) of the subjects", it was observed that the majority of the teachers (M=3.17; SD=0.81) and students (M=3.74; SD=0.54) strongly agreed subscribed to that view. This result means that both teachers and students agreed that teachers had adequate content knowledge. That is, the majority of teachers had mastery of the subjects in the schools. It is believed that teachers' pedagogical-content knowledge is a significant factor that would determine and influence students' academic achievement.

As shown in Table 5, it was found that most teachers (M=3.07; SD=0.87) and students (M=3.41; SD=0.71) agreed to the statement that, "The teachers helped students to understand issues after normal classes". This result suggests that teachers supported and offered assistance to all students to understand the lesson taught. The teacher's support is believed to be a significant factor that would determine and influence students' academic achievement. With regard to the statement, "The teachers use different materials/resources (both audio-visual) aids in teaching," it was realized that both teachers (M=2.93; SD=0.89) and students (M=2.80; SD=0.87) agreed to the statement. This result means that teachers used teaching and learning resources or materials in the form of audio, visual and audio-visual in the delivery of their lessons. Teaching and learning materials or resources are important factors that affect students' academic achievement. Teaching and

learning resources or materials are believed to motivate, sustain and retain the interest of the students during instructional process.

From Table 5, it was found that both teachers (M=1.63; SD=1.15) and students (M=2.14; SD=1.03) strongly disagreed to the statements that the teachers taught so many topics in a short period of time. This result suggests that both teachers and students revealed that the teachers did not teach so many topics. This implies that teachers teach according to their daily lesson plans. Similarly, to the statement, "The teachers always criticize students and put them to shame", it was found that both teachers (M=1.73; SD=1.09) and students (M=1.96; SD=1.11) disagreed to the statement. This result implies that teachers did not criticize students or put students into shame; rather, teachers motivated and boosted the morale and sustained the interest of students by using appropriate teaching and learning methods, teaching and learning activities, relevant examples, and teaching and learning resources.

It could be adduced from these results that the teachers supported and motivated students during instructional process and this is believed to facilitate students' achievement in schools. As regards the statement, "The teachers are frequently absent from class or late to class", it was found that both teachers (M=1.27; SD=1.22) and students (M=1.71; SD=1.19) strongly disagreed to the statement. This result means that the teachers were always punctual to school and to the classroom for teaching and learning. It is believed that the teachers' presence and punctuality to the classroom is a significant factor that would improve students' academic achievement. Teachers' presence in the school or classroom serves as a source of students' motivation.

From these results, it is concluded that on the average, both teachers (MM=2.75; SD=0.86) and students (MM=2.96; SD=0.82) agreed with statements relating to teacher-related factors that significantly determined and influenced low-SES JHS students' academic achievement in the Aboom Circuit. This result implies that both teachers and students had positive views concerning teacher-related factors and it is adduced from this that teacher-related factors such as mastery of content knowledge, effective use of teaching methods, effective use of teaching and learning materials/resources, appropriate teaching and learning activities, relevant examples, creating conducive and positive classroom climate and atmosphere and motivation would positively and significantly contribute to students' academic achievement.

These results were in agreement with the findings of Lockheed and Verspoor (2001), who revealed that teacher knowledge of the subject matter coupled with appropriate use of textbooks, instructional time and other learning materials have great influences on learning at the basic school level. Effective teaching embraces different aspects of teaching such as subject mastery, effective communication, lesson preparation and presentation and taking into account individual differences, thereby allowing students to practice and apply what they have learned, letting students know what is expected of them, and monitoring and evaluating achievement so that students learn from their mistakes (Lockheed & Verspoor, 2001).

These results were also consistent with the findings of Fetler (2001) who concluded that the quality of teaching was positively related to students' achievement. In Laeheem's (2007) study, teaching quality had positive

relation to students' academic achievement significantly. Nevertheless, teachers' characteristics and teaching behavior had no significant relation to students' achievement (Lau, 2003). In related studies by Gaurdino and Fullerton (2010) and Laeheem (2007), it is seen that classroom atmosphere had positive relations to students' achievement. These findings also support the study of Bangbade (2004), who found that teachers' attribute in terms of teachers' subject matter knowledge, communication ability, emotional stability, good human relationship and interest in the job had significant relationship with students' academic achievement. This is in support of the present study's findings that teacher-related factors were deemed to be the most impactful category of factors that contribute positively and significantly to students' academic achievement in the Aboom Circuit. Rena (2000) further explained that for students to perform well in any examination, one of the prerequisites is that their teachers must know them and have profound knowledge of their state of physical, intellectual and psychological readiness.

These results buttress the findings of Macalino et al. (2005), who concluded that quality of the school and classroom instruction largely depends on quality teachers, schools and learners. No one has a better influence in learning than the teacher. Teachers' teaching experience also contributes to pupils' achievement. It is also a fact that older teachers are said to be more dedicated and devoted to the service. By virtue of their length of time and stay in the teaching service, they acquire more experiences (Lansangan et al., 2015).

These results were similar to the findings of Bernardo (2000), who concluded that poor inputs (teaching and learning resources and the caliber of

teachers) to the learning process yield poor outputs, which explains the poor achievement of students. In light of this, it could be established that most of the schools in the Aboom Circuit lack qualified and competent teachers and quality teaching and learning resources. Absence of these qualities would negatively affect the academic achievement of students. Morakinyo (2003) believes that the falling level of academic achievement is attributable to teacher's non-use of verbal reinforcement strategy. Others found out that the attitude of some teachers to their job is reflected in their poor attendance to lessons, lateness to school, unsavory comments about pupil's achievement that could damage their ego, poor method of teaching and the likes affect pupils' academic achievement (Aremu & Sokan, 2003; Aremu & Oluwole, 2001).

These results were also dissimilar to the findings of Fobih et al. (1999) who found that about 85 per cent of teachers go to school late. Lateness ranged from five minutes up to one and a half hours. Lateness and absenteeism also affect the completion of syllabi. When the syllabus is not completed, pupils find it difficult to understand content that is to be taught in the next class; the foundation of which in most cases is based on the previous class (Etsey, 2005). Ofoegbu (2004) also linked poor academic achievement of students to poor teachers' achievement in terms of accomplishing the teaching task, their negative attitudes to work and poor teaching habits which have been attributed to poor motivation. Corroborating this position, Lockheed and Verspoor (2001) asserted that lack of motivation and professional commitment on the part of teachers lead to poor attendance and unprofessional attitudes towards pupils which in turn affects the achievement of students, academically.

Research Question 3: What are the home-related factors that contribute to the academic achievement of low-SES JHS Students in Aboom Circuit?

The main objective of this research question was to assess the views of teachers and students concerning home-related factors that contribute to academic achievement of low-SES JHS students. On a four-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree), both teachers and students were asked to indicate their levels of agreement or disagreement with statements posed by the researcher on home-related factors. The results were discussed using means and standard deviation. *A mean of 2.50 and above indicates respondents' agreement with the factors while a mean of 2.49 and below indicates respondents' disagreement with the factors*. The results are presented in Table 6.

Table 6: Home-Related Factors that Contribute to the Students' Academic Achievement

Statements	Teachers (n=30)		Students (n=347)	
	Mean	SD	Mean	SD
1. The students live near or afar from the school	2.53	0.88	3.07	0.76
2. All the students live with their parents	2.10	1.27	1.82	1.11
3. The students' parents are working	2.67	0.79	3.52	0.66
4. The students' parents have enough time for them	2.43	0.93	1.81	1.19
5. The students' parents are educated	2.57	1.21	2.55	0.88
6. The students' parents discuss school activities with their children	1.93	1.17	2.23	0.97

7. The students' parents assist them in their homework	1.97	1.11	2.04	1.05
8. The students parents always motivate them to learn more and do well in the school	2.33	0.96	2.31	0.92
9. The students' parents/guardians attend school activities	2.57	0.83	3.12	0.70
10. The students' parents want them to attend college	2.80	0.72	3.52	0.66
11. After school, the students sell to support their parents	3.73	0.63	2.64	0.81
Mean of Means/SD	2.51	0.92	2.60	0.88

Source: Field data, 2016

Table 6 shows the results of the teachers and students concerning their view on home-related factors that contribute to low SES students' academic achievement. It is apparent from the results in Table 6 that both teachers and students had similar concerns regarding the home-related factors that contribute to low SES JHS students' academic achievement. It could be inferred that both teachers and students viewed these factors as significant variables that might contribute to students' academic achievement either positively or negatively. For example, concerning the statement, "The students live near or afar from the school", it was found that teachers agreed (M=2.53; SD=0.88) with the statement while the students strongly agreed (M=3.07; SD=0.76) with the statement.

These results suggest that both teachers and students indicated that distance (place where students live) is factor that affects students' academic achievement. Similarly, when the teachers and students were asked whether the students live with the parents, it was observed that teachers disagreed

(M=2.10; SD=1.27) with the statement while and the students strongly disagreed (M=1.82; SD=1.11). These results suggest that most of the students did not live with their parents. It could be deduced that the students might be staying with their grandparents or any family relatives. This could be a significant factor that might determine and influence students' academic achievement negatively in the Aboom Circuit for the reason that some of the grandparents or family relatives might not be involved in the students' academic activities (both home and school) or provide the necessary support that the child needs to enhance his/her academic achievement.

From Table 6, it was noted that the majority of the teachers and students disagreed with the statement that the students' parents had enough time for them. This was evident by the mean score of (M=2.43; SD=0.93) for teachers and (M=1.81; SD=1.19) for students. This result implies that most parents did not have sufficient time for their wards and this could be credited to the fact that most students were not living with their parents. This could affect students' academic achievement negatively because, parent support is said to be a significant factor that contributes to students' academic achievement. So in a case where parents do not have adequate time for their wards, it is believed that some students might end up performing very poorly in school because the basic needs of their children in terms of schooling are ignored or neglected. This could also be attributed to neglectful parenting styles. As regards the statement, "The students' parents discuss school activities with their children" from the table 6, it was found that both teachers (M=1.93; SD=1.17) and students (M=2.23; SD=0.97) strongly disagreed to the statement. Similarly, to the statement "The students' parents assist them in

their homework", it was revealed that both teachers (M=1.97; SD=1.11) and students (M=2.04; SD=1.05) strongly disagreed to the statement. These results imply that parents were uninvolved and did not support their children in school activities. This could negatively affect students' academic achievement.

On whether parents motivated their children to study very well in the schools, it was realized, as seen in Table 6, that both teachers (M=2.33; SD=0.96) and students (M=2.31; SD=0.92) revealed that students' parents did not always motivate students to learn more and do well in school. It is said that students achievement motivation (intrinsic, extrinsic, amotivation) from parents is major significant factor that contributes to students' academic achievement, but in a situation where parents' motivation is absent, it is believed that most students' achievement will be very appalling. Parents who motivate their wards always inspire them and give them hope. Students who are motivated by parents perform academically more than those students who are not motivated by parents.

With regard to the statement "After school, the students sell to support their parents", it was found that both teachers (M=3.73; SD=0.63) and students (M=2.64; SD=0.81) strongly agreed with the statement. This result suggests that most students had parents with es. It could be inferred that these students might struggle financially; hence, it would be very difficult for them to even purchase all the necessary materials needed for school. This condition would significantly affect students' academic achievement negatively.

From these results, it is concluded that on the average, both teachers (MM=2.51; SD=0.92) and students (MM=2.60; SD=0.88) agreed to the statement concerning home-related factors. This result implies that both the

teachers and students view these home-related factors as significant factors that may contribute to students' academic achievement. Thus, the presence of home related factors such as parents not living with children, home-school distance, lack of parental support and involvement, lack of parental motivation and low parental socio-economic status could negatively affect students' academic achievement.

These results were similar to the findings of Goddard (2003), who found that students home and families provide help and support for the students for the quality of their academic achievement. These results are also consistent with the findings of Barnard (2004) and Marzano (2003) who indicated that the home environment affects the academic achievement of students. Educated parents can provide such an environment that suits best for academic success of their children. The academic achievement of students greatly depends upon the parental involvement in their academic activities which help them to attain higher level of academic success (Barnard, 2004; Shumox & Lomax, 2001).

These results are similar to those of previous studies (Koonna, 2007; Laeheem, 2007; Mij & Makgato, 2006) which concluded that educational support by the family held positive relation to students' academic achievement. According to Krashen (2005), students whose parents are educated score higher on standardized tests than those whose parents were not educated. We can thus, assert that educated parents can better communicate with their children regarding the school work, activities and the information being taught at school. Parents' involvement in their child's education increases the rate of academic success of their child (Furstenberg & Hughes,

2005). The results of the current study are also in agreement with the findings of Sommai (2008), who concluded that parents' inadequate income and child working to support the family contributes to students' low academic achievement. Also, commuting distance affects students' academic achievement. That is to say, a student whose family house is far away has to stay either in dormitory or in an apartment close to the school.

The results of the current study, however, contradict the findings of Jeynes (2002) and Mitchell and Collom (2001), who concluded that parental education and family SES level have positive correlations with the student's quality of achievement. The students with high levels of SES perform better than the middle class students and the middle class students perform better than the students with low level of SES (Kirkup, 2008; Garzon, 2006; Kahlenberg, 2006). The achievement of students is negatively correlated with the low SES level of parents because it hinders the individual in gaining access to sources and resources of learning (Eamon, 2005; Duke, 2000). Low SES levels strongly affect the achievement of students, dragging them down to a lower level (Sander, 2001). This effect is most visible at the post-secondary level (Trusty, 2000). It is also observed that the economically-disadvantaged parents are less able to afford the cost of education of their children at higher levels and consequently, they do not work to their fullest potential (Rouse & Barrow, 2006).

The results of the current study, however, contradict the findings Krashen (2005), who concluded that students whose parents are educated score higher on standardized tests than those whose parents are not educated. Educated parents can better communicate with their children regarding the

school work, activities and the information being taught at school. They can better assist their children in their work and help them participate actively in school learning activities (Fantuzzo & Tighe, 2000). Moula (2010) explored positive and significant relationships between home environments including parental encouragement with academic achievement.

Research Question 4: What are the student-related factors that contribute to the academic achievement of low-SES JHS Students in the Aboom Circuit??

The main objective of this research question was to examine the views of teachers and students concerning student-personal-related factors that contribute to academic achievement of low-SES JHS students. On a four-point Likert scale (1=strongly disagree, 2=disagree, 3=agree, and 4=strongly agree), both teachers and students were asked to indicate their levels of agreement or disagreement with statements posed by the researcher on students-related factors. The result was discussed using means and standard deviation. *A mean of 2.50 and above indicates respondents' agreement with the factors while a mean of 2.49 and below indicates respondents' disagreement with the factors*.

The results are presented in Table 7.

Table 7: Student-Related Factors that Contribute to the Students' Academic Achievement

Statements	Teachers (n=30)		Students (N=347)	
	Mean	SD	Mean	SD
1. The students sometimes feel sleepy in the classroom	2.67	0.97	2.64	0.83
2. The students sometimes feel hungry in the class	2.77	0.90	2.71	0.78
3. The students find it difficult to see clearly on the boards and to hear the teachers	2.10	1.19	1.77	1.11

4. The students only study when there is a class test or an exercise	2.77	0.90	1.93	1.08
5. The students listen to radio/watch TV when they are learning at home	2.80	0.86	1.73	1.13
6. The students sometimes feel lazy, tired, or bored to study	2.57	0.97	2.75	0.71
7 The students are sometimes disturbed by their friends when they (the students) are learning	2.56	0.99	3.05	0.69
8. The students sometimes copy their assignments and homework from their friends	2.90	0.77	1.44	1.21
9. Sometimes, the students are involved in school activity	3.03	0.67	3.01	0.65
10. The students sometimes lack self-motivation to perform well in school	2.80	0.86	3.60	0.54
11. The students always absent themselves from the school or come to class late	3.17	0.59	3.27	0.63
Mean of Means/SD	2.74	0.88	2.54	0.85

Source: Field data, 2016

From Table 7, pertaining to respondents' view on students' related factors that contribute to students' academic achievement, it was observed that both teachers and students had varied concerns. Most teachers agreed to some statements as factors contributing to students' academic achievement while the students disagreed to those factors. For example, the majority of the teachers indicated (M=2.77; SD=0.90) that the students only studied when there was a class test or an exercise while the students disagreed (M=1.93; SD=1.08) to the same statement. This result means that the teachers believed that most students had poor studying habit while the students believed they always

learned. It is important for us to know that students' studying habit is a significant factor that contributes to students' academic achievement. When students have positive studying habits, their academic achievement meaningfully and positive get improved and vice versa.

To the statement, "The students listen to radio/watch TV when they are learning at home", it was found that the majority of the teachers strongly agreed (M=2.80; SD=0.86) to the statement while the majority of the students strongly disagreed and refuted (M=1.73; SD=1.13) the statement (see Table 7). To the teachers, they agreed that the media (TV, radio) is a factor that affects students' academic achievement while the students disagreed. It is of essence to establish the fact that most 21st century students in Ghana watch TV and listen to radio. These students are attracted and engrossed by the movie shows on the media. Some students watch movies deep into the night and most of them end up not studying or revising their notes. This practice could negatively affect students' academic achievement (Table 7).

As shown in Table 7, it was observed that the majority of the teachers strongly indicated (M=2.90; SD=0.77) that most of the students sometimes copied their assignments and homework from their friends while the majority of the students strongly disagreed (M=1.44; SD=1.21) with the statement that they copied their assignments and homework from their colleagues. This result suggests that both teachers and students had varied perspective of the statement. Likewise, both teachers (M=2.67; SD=0.97) and students (M=2.64; SD=0.83) agreed to the statement that most of the students sometimes felt sleepy in the classroom. In the same way, to the statement, "The students sometimes feel hungry in the class" it was realised that both teachers (M=2.77;

SD=0.90) and students (M=2.71; SD=0.78) agreed to the statement. These results suggest that most students might not be having sufficient money for school as a result of the es of their parents. This hunger would make students feel asleep in the classroom while the teachers are teaching. This hunger condition would significantly affect students' academic achievement negatively because the student's zeal and motivation to learn or study would be affected.

It was observed that both the teachers (M=2.10; SD=1.19) and students (M=1.77; SD=1.11) strongly disagreed with the statement that, "The students found it difficult to see clearly on the boards and to hear the teachers". This result suggests that most students in the schools see clearly from the blackboard during instructional process and it is believed that students might almost get every concept from the classroom right. From Table 7, it was found that both teachers (M=2.57; SD=0.97) and students (M=2.75; SD=0.71) again agreed to the statement that, "The students sometimes feel lazy, tired, and bored to study". Congruently, to the statement, "The students sometimes lack self-motivation to perform well in school", it was found that both teachers (M=2.80; SD=0.86) and students (M=3.60; SD=0.54) agreed that lack of students motivation is a significant factor that contributes to students' negative academic achievement. Students' self-motivation is considered to be students' intrinsic motivation and students' intrinsic motivation is revealed to be a significant factor that influences and determines students' academic achievement. Students' intrinsic motivation is usually influenced by students' self-concept, self-esteem and self-efficacy.

From Table 7, concerning the statement, "The students are sometimes disturbed by their friends when they (the students) are learning" it was noted that both teachers (M=2.56; SD=0.99) and students (M=3.05; SD=0.69) strongly agreed to the statement. This result infers that most of the students were disturbed by the colleagues during the course of learning. This could be associated with peer pressure which is a significant factor that contributes to students' academic achievement. Harmoniously, to the statement, "Sometimes, the students are involved in school activity", it was found that both teachers and students agreed with the statements. This was evident by the mean score of (M=3.03; SD=0.67) for teachers and (M=3.01; SD=0.65) for students. Respectively, the majority of the teachers (M=3.17; SD=0.59) and students (M=3.27; SD=0.63) revealed that most of the students always absented themselves from the school or came to class late. This could be said to relate to student truancy and absenteeism, and student truancy or absenteeism is seen as a major factor considered to affecting students' academic achievement.

From these results, it is concluded that on the average, both teachers (MM=2.74; SD=0.88) and students (MM=2.54; SD=2.54; SD=0.85) agreed to the statements concerning student-related factors that contribute to academic achievement. This result means that most of the teachers and students believed that continued, consistent and persistent presence of these student-related factors such as hunger, lack of self-motivation, poor study habit, watching TV, laziness, and students' truancy or absenteeism would negatively affect students' academic achievement.

Several researchers have investigated the significant role of students' attitudes towards learning with regard to their academic achievement. Students' attitudes such as absenteeism, truancy, indiscipline, and so on have been found to affect students'' academic achievement as revealed by the current study. Pupils' attitudes may not only directly affect academic achievement, but also may indirectly influence the effects of other factors as well. The results are incongruence with the findings of Abu-Hilal (2000) that attitudes affect students' level of aspiration. The results also collaborated with the findings of Chupinit (2007) that students' study habits was a factor used in predicting academic achievement. Paying attention in class was positively related to academic achievement. Again, the results of the current study are similar to the findings of Tsinidou, Gerogiannis and Fitsilis (2010), who concluded that the environment and the personal characteristics of learners play an important role in their academic successes.

The results also confirmed the findings of Kamwang (2003), who concluded that poor academic achievement might result from irregular class attendance, lack of preparation before class, lack of class attention, lack of revision after class, and lack of class participation. The results also buttressed the findings of Allen-Meares et al. (2000), who concluded that poor attendance such as truancy or unexcused absence from school, cutting classes, tardiness, and leaving school without permission are important factors in determining pupils' academic achievement. The results of the current study are consistent with the findings of Pimthong (2003) that lack of students' achievement motivation and negative study attitudes, can all result in a learner's study problems. The results also confirmed the findings of previous

researchers (Al-Shabatat, 2010; Ghazi et al., 2010; Manjuvani & Anuradha, 2011) that students' motivation is positively correlated with students' academic achievement

Results from Research Hypotheses

In this section, the results of the hypotheses testing were given (Table 8-12). In all, 5 hypotheses were postulated and tested. They are as follows:

Hypothesis 1: There is no significant correlation between school-related factors and academic achievement of low-SES JHS students in the Aboom Circuit.

As seen in Table 8, the relationship between school-related factors and academic achievement was investigated, using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure that there were no violation of the assumptions of normality, linearity and homoscedasticity. The results of the study indicated that there was a strong and negative correlation between the two variables [r = -0.70, n=377, p < 0.005], with high levels of perceived negative school-related factors associated with low levels of students' academic achievement and vice versa.

Table 8: The Relationship between School-Related Factor and Students' Academic Achievement

Variables	N	df	R	R^2	Sig. (2-tailed)
School-related factor					
	377	375	-0.70*	0.49	0.020
Academic achievement					

Source: Field data, 2016 *Significant at P< 0.05

This result suggests that when there are high negative school-related factors, students' academic achievement would significantly decline. This implies that negative school-related factors would significantly determine and influence students' academic achievement. However, based on the coefficient of determination value (R square = 0.49), it could be concluded that school-related factors explain or account for only approximately 49% of the changes in students' academic achievement. This therefore implies that there are about 51% of the changes in students' academic achievement which are accounted for by other variables or factors. From this result, it is concluded that there is a statistically significant correlation between school-related factors and academic achievement of low-SES JHS students Aboom Circuit; consequently, the null hypothesis is rejected.

These results were consistent with the findings of Karemera (2003), who found that students' achievement is significantly correlated with satisfaction with academic environment and with the facilities such as libraries and computer labs in the institution. The academic environment is the effective variable for students and has positive relationship with fathers' education and grade level (Kirmani & Siddiquah, 2008). The availability and use of teaching and learning materials affect the effectiveness of a teacher's lessons (Lockheed & Verspoor, 2001). Students usually perform better when they have books or study aids that foster their learning. These study aids or material resources could be textbooks, teachers' guides, wall pictures, maps, atlases and other learning aids. Harbison and Hanushek (2002) stated that the quality of the physical facilities is positively related to student achievement.

Class sizes have also been identified as determinants of academic achievement. Studies have indicated that schools with smaller class sizes perform better academically than schools with larger class sizes. Tremblay et al. (2001) found class size to be inversely related to achievement, especially for children in early grades. Kraft (2004) in his study of the ideal class size and its effects on teaching and learning in Ghana concluded that class sizes above 40 have negative effects on students' achievement. Adeyela (2000) found that large class sizes are unconducive for serious academic work.

Hypothesis 2: There is no significant correlation between teacher-related factors and academic achievement of low-SES JHS students in the Aboom Circuit.

Table 9: The Relationship between Teacher-Related Factor and Students' Academic Achievement

Variables	N	df	R	R^2	Sig. (2-tailed)
Teacher-related factor					
	377	375	0.66*	0.44	0.031
Academic achievement					

Source: Field data, 2016 *Significant at P< 0.05

Table 9 presents the correlation coefficient between teacher-related factors and students' academic achievement. Preliminary analyses were performed to ensure that there were no violation of the assumptions of normality, linearity and homoscedasticity. The results of the analyses indicated that there was a strong, positive correlation between the teacher-related factors and students' academic achievement [r=0.66, n=377, p<.005], with high levels of perceived teacher-related factors associated with high levels of students' academic achievement and vice versa. This result implies

that positive teacher-related factors would significantly determine and influence students' academic achievement.

Likewise, based on the coefficient of determination value (R square = 0.44), it could be concluded that teacher-related factors explain or account for only approximately 44% of the changes in students' academic achievement. This therefore implies that there about 56% of the changes in students' academic achievement which is accounted for by other variables or factors. It is concluded that there is a statistically significant correlation between teacher-related factors and students' academic achievement of low-SES JHS students in the Aboom Circuit, consequently, the null hypothesis is rejected.

The results of the current study are consistent with the findings of Jacob and Lefgren (2006), who found a positive correlation between effective teaching and academic achievement. Similarly, the results of the current study support the findings of Adediwura and Tayo (2007), who concluded that effective teaching is a significant predictor of students' academic achievement and they concluded that effective teaching produce students of higher academic quality. Correspondingly, Akiri and Ugborugbo (2009) showed that teachers' quality (mastery of the content knowledge, effective action system, relevant example and teaching activities) produced better performing students. Equally, the results of the current study confirmed the findings of Greenwald, Hedges and Laine (2006) who found that teacher qualification, support and level of competency are positively correlated with students' academic achievement and additionally, Abuseji (2007) found teacher's qualification to be the second most potent causal effect on student's achievement.

Hypothesis 3: There is no significant correlation between home-related factors and academic achievement of low-SES JHS students in the Aboom Circuit.

Table 10: The Relationship between Home-Related Factors and Students' Academic Achievement

Variables	N	df	r	R^2	Sig. (2-tailed)
Home-related factor					
	377	375	0.86*	0.74	0.009
Academic achievement					

Source: Field data, 2016 *Significant at P< 0.05

As seen in Table 10, the relationship between home-related factors and students' academic achievement was investigated, using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure that there were no violations of the assumptions of normality, linearity and homoscedasticity. The results of the study indicated that there was a strong, positive correlation between home-related factors and students' academic achievement [r = 0.86, n=377, p < 0.005], with high levels of perceived home-related factors matching with high levels of students' academic achievement. This result implies that positive home-related factors would significantly determine and influence students' academic achievement positively and vice versa. Equally, based on the coefficient of determination value (R square = 74%), it could be concluded that home-related factors explain or account for only approximately 74% of the changes in students' academic achievement. This therefore implies that there about 26% of the changes in students' academic achievement which are accounted for by other variables or factors. It is concluded that there is a statistically significant

correlation between home-related factors and students' academic achievement of low-SES JHS students in the Aboom Circuit, hence, the null hypothesis is rejected.

The results of the current study support the findings of Jeynes (2002) and Mitchell and Collom (2001) who concluded that home environment, in terms of parental education and family SES levels have positive correlations with the students' quality of achievement. The students with high level of SES perform better than the middle class students and the middle class students perform better than the students with low level of SES (Garzon, 2006; Kirkup, 2008). The achievement of students is negatively correlated with the low SES level of parents because it hinders the individual in gaining access to sources and resources of learning (Duke, 2002; Eamon, 2015). Again, low SES level strongly affects the achievement of students, dragging them down to a lower level (Sander, 2001).

The results of the current study confirmed the findings of previous researchers who indicated that students' home environment, in terms of parental encouragement, had positive and significant relationship with academic outcomes of their children (Codjoe, 2007; Murphy, 2009) whereas studies by Adetoyo & Kiadese (2011) and Ghazi et al., (2010) focused on parental involvement and found the existence of positive and significant relationships with educational outcomes of their children. On the other hand, Muola (2010) demonstrated that parental encouragement had no relationship with academic achievement while Mau (2007) found parental encouragement had negative effect on academic achievement of the students.

Hypothesis 4: There is no significant correlation between student-related factors and academic achievement of low-SES JHS students in the Aboom Circuit.

Table 11: The Relationship between Students-Related Factors and Students' Academic Achievement

Variables	N	df	r	R^2	Sig. (2-tailed)
Students-related factor					
	377	375	0.45*	0.20	0.004
Academic achievement					

Source: Field data, 2016 *Significant at P< 0.05

As evident in Table 11, the relationship between student-related factors and students' academic achievement was investigated, using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure that there were no violations of the assumptions of normality, linearity and homoscedasticity. The results of the study indicated that there was a moderate, negative correlation between student-related factors and students' academic achievement [r = -0.45, n=377, p < 0.005], with high levels of perceived student-related factors with low levels of students' academic achievement. This result implies that negative students-related factors would significantly determine and influence students' academic achievement negatively and vice versa. In the same way, based on the coefficient of determination value (R square = 0.20), it could be concluded that student-related factors explain or account for only approximately 20% of the changes in students' academic achievement. This therefore implies that there are about 80% of the changes in students' academic achievement which is accounted for by other variables or factors. It is concluded that there is a statistically-

significant correlation between students' personal related factors and students' academic achievement of low-SES JHS students in the Aboom Circuit. As a result, the null hypothesis is rejected.

The results of the current study corroborated with the findings of Chupinit (2007), that students' study habits was a factor used to predict academic achievement. Again, paying attention in class was positively related to academic achievement. The results of the study are similar to the findings of Tsinidou et al. (2010) whose work revealed that the environment and the personal characteristics of learners play an important role in their academic success. The results also confirmed the findings of Kamwang (2003), who concluded that poor academic achievement might result from irregular class attendance, lack of preparation before class, lack of class attention, lack of revision after class, and lack of class participation. The results buttressed the findings of Allen-Meares et al. (2000) that poor attendance such as truancy or unexcused absence from school, cutting classes, tardiness, and leaving school without permission are important factors in determining pupils academic achievement.

The results of the current study are consistent with the findings of Pimthong (2003), who conclude that the lack of students' achievement motivation and negative study attitudes can all result in a learner's study problems. Also, the results of the study supported the findings of researchers (Al-Shabatat, 2010; Ghazi et al., 2011; Manjuvani & Anuradha, 2011) who found a positive relationship between students' achievement motivation and their academic achievement.

Hypothesis 5: There is no statistical significant impact (prediction) of school, teachers, home and personal factors on students' academic achievement

Table 12: Multiple Regression Analysis between School, Teachers, Home and Students-Related Factors and Students' Academic Achievement

Variables	Unstandardized Coefficients		Standardized Coefficients (β)	t-value	p-value
	B	Std. Error			
(Constant)	130.911	8.387		15.608*	0.000
School-Factors	- 0.137	0.157	-0.048	-0.873*	0.038
Teacher-factors	1.802	0.198	0.123	1.412*	0.017
Home-Factors	1.217	0.193	0.164	1.124*	0.026
Student-Factors	- 0.014	0.160	-0.005	-0.089*	0.019
Multiple R value	0.674a		F value		0.957
R Square value	0.454		P value		0.003
Adjusted R Square	0.425		Durbin-Watson		2.024

a. Predictors: (Constant), school-factors, Teacher-factors, Home-factors, student-factors

b. Dependent Variable: Students' Academic Achievement

Source: Field data, 2016 *Significant at P< 0.05

Table 12 presents the results of the multiple regression analysis between independent variables (school, teacher, home and student-related factors) and the dependent variable (students' academic achievement). The results of the multiple regression analysis show that the multiple correlation coefficients is 0.674 and it measures the degree of relationship between the actual values and the predicted values of the students' academic achievement. Because the predicted value is obtained as a linear combination of school-related factors, teacher-related factors, home-related factors and student-

related factors, the coefficient value of 0.674 indicates that the relationship between independent variables (school-related factors, teacher-related factors, home-related factors and student-related factors) and dependent variable (students' academic achievement) is very strong, high and positive.

From Table 12, the R^2 (R-square) measures the goodness-of-fit of the estimated Sample Regression Plane (SRP) in terms of the proportion of the variation in the dependent variables explained by the fitted sample regression equation. That is, the value of R-square is 0.454, which simply means that about 45% of the variation in students' academic achievement is explained and accounted for by the predictors as the independent variables and R square value is significant at 5 percent level. The adjusted R^2 gives us some idea of how well the model generalises and ideally its value should be same or very close to the value of R^2. In this model, the difference is fair a bit (0.454 - 0.425 = 0.029 or 2.9%). This shrinkage (2.9%) means that if the model was derived from the population rather than the sample, it would account for approximately 2.9% less variance in the outcome.

From Table 12, the Durbin-Watson statistics is 2.024 and it tests for autocorrelation in the residuals from a statistical regression analysis Thus, it informs whether the assumption of independent errors is tenable or otherwise and in this data, it is seen that the value is close to 2; hence, the assumption has almost certainly been met. The Durbin-Watson statistics is 2.024 and it is between the two critical values of $1.5 < d < 2.5$. Therefore, I can assume that there is no first order linear auto-correlation in the multiple linear regression data, and that there is no auto-correlation in the sample. From the multiple linear regression model, it is again seen that the F-test has the null hypothesis

that there is no linear relationship between the variables (in other words, $R^2=0$). The value of F-test is found as below the standard value of rule of thumb 4.00 and the significance level is just 0.003. The F-test is highly significant. Thus, we can assume that there is a linear relationship between the variables in our model. All these findings are disclosing that the model is satisfactory. All these findings give credence that the model used was satisfactory

From Table 12, the multiple regression coefficients (b-values) tell about the relationship between students' academic achievement and each predictor (independent variables). If the value is positive, then there is a positive relationship between the predictors (independent variables) and the predicted variable (students' academic achievement) whereas a negative co-efficient represents a negative relationship. The multiple regression co-efficient also tells us to what degree each predictor affects the dependent variable if the effect of all other predictors are held constant.

As shown in Table 12, the constant of the regression model was 130.911 which mean that even when the independent variables (school-related factors, teacher-related factors, home-related factors and student-related factors) are held constant or held at zero, students' academic achievement will still be 130.911. The coefficient of school-related factors is - 0.137, representing the partial effect of school-related factors on students' academic achievement, and holding other independent variables as constant. The estimated negative sign implies that such effect of school-related factors on students' academic achievement is negative and that students'' academic achievement score would decrease by 0.137 for every unit increase in school-

related factors. Again, the multiple regression coefficients of teacher-related factors are 1.802, representing the partial effect of teacher-related factors on students' academic achievement, holding other independent variables as constant. The estimated positive sign implies that such effect of teacher-related factors on students' academic achievement is positive and that students' academic achievement score would increase by 1.802 for every unit increase in teacher-related factors.

From Table 12, it is found that the multiple regression coefficients of home-related factors is 1.217, representing the partial effect of home-related factors on students' academic achievement, holding other independent variables as constant. The estimated positive sign implies that such effect of home-related factors on students' academic achievement is positive and that students' academic achievement score would increase by 1.217 for every unit increase in home related factors. Yet again, the multiple regression coefficients of student-related factors are -0.014, representing the partial effect of student-related factors on students' academic achievement, holding other independent variables as constant. The estimated negative sign implies that such effects of student-related factors on students' academic achievement is negative and that students' academic achievement score would decrease by 0.014 for every unit increase in student-related factors.

From Table 12, it is again seen that the independent variables (predictors) coefficient value is significant at 5% level. This means that school-related factors, teacher-related factors, home-related factors and student-related factors are significant variables that determine and predict students' academic achievement. The b-value (co-efficient) has an associated

standard error indicating to what degree or extent these values would vary across different samples, and these standard errors were used to determine whether or not the b-values differ significantly from zero using t-statistics). From Table 12, it clear that the t-test associated with each b-value (co-efficient) is significant (p-value less than 0.05). Therefore, it could be said that each predictor (independent variables) is making a valuable and significant contribution to the model. For this model, school-related factors, t(372)= -0.873, p=0.038, teacher-related factors, t(372)= 1.412, p=0.017, home-related factors, t(372)= 1.124, p=0.026, and student-related factors, t(372)= -0.089, p=0.019. From the magnitude of the t-statistic, I can conclude that teacher-related factors and home related factors had extremely more impact or effect or prediction than school-related factors and student-related factors had more impact on students' academic achievement. Therefore, it is also concluded that there is a significant impact (prediction) of school, teachers, home and personal factors on students' academic achievement; consequently, the null hypothesis is rejected.

The results of the current study confirmed the findings of Alos et al. (2015) who found teacher-related factors as the highest predictor of students' academic achievement and that school-related factors fall behind the teacher-related factors. Conversely, personal conditions and home-related factors pose little effect on student nurses' academic achievement. The results of the current study are consistent with the findings of Frimpong, Agyeman and Frimpong (2016) who found that institutional factors (such as overcrowded classrooms, unfavorable learning environment and closure of school) affect students' achievement. Similarly, Kyoshaba (2009) found that home-related

factors (such as social economic status) had positive relationship between students' academic achievement. The results of the current study are also consistent with the findings Musili (2015), who concluded that teacher-related factors (teachers' motivation, teacher professional training, and professional experience) is a key factor that influences students' achievement. The results of the current study contradict the findings of Kimani, Kara and Njagi (2013), who found that teacher-related factors (professional qualifications and teaching experience) were not significantly related to academic achievement.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter provides a summary of the study. The summary of the study is organised into two folds. The first focuses on the summary of the research process while the second presents a summary of the key findings. Based on the key findings, conclusions are made. The chapter also provides recommendations based on the key findings and the conclusions drawn.

Summary

The present study was an investigation of factors contributing to the high academic achievement of students in the Aboom Circuit of the Cape Coast Metropolis during the 2015/2016 academic year. The factors considered in this work were school-related factors, teacher-related factors, home-related factors and student-related factors. The study employed descriptive survey design. The descriptive method was used to identify and describe the factors that affect the academic achievement of the intermediate pupils. The population for the study included all JHS students and teachers in the Aboom Circuit of the Cape Coast Metropolis. The sample size for the study was 350 for students and 30 for teachers. The student sample was selected using simple random sampling techniques and a census method was used in selecting the teachers for the study. Two sets of self-developed questionnaire were used in the data collection. The textual data also comprised students' test results (end-of-term exams). The data were analysed, using both descriptive descriptive

(frequency and percentages, means and standard deviation) and inferential statistics (Pearson correlation, multiple regression).

Key Findings

1. The study found that both teachers (MM=2.65; SD=0.90) and students (MM=2.90; SD=0.95) indicated school related-factors such as (1) teaching and learning resources, (2) class size, (3), school environment and climate and (4) guidance and counseling were the most significant contributors to students' academic achievement in the Aboom Circuit.
2. Both teachers (MM=2.75; SD=0.86) and students (MM=2.96; SD=0.82) indicated teacher-related factors such as (1) pedagogical-content knowledge, (2) teaching styles/strategies and (3) classroom management as the most significant variables which contributed to students' academic achievement within the Aboom Circuit.
3. Both teachers (MM=2.51; SD=0.92) and students (MM=2.60; SD=0.88) agreed upon home-related factors such as (1) parent socio-economic status, (2), parental support and involvement, (3) parenting styles and (4) parental encouragement and motivation as the most important variables which contributed to students' academic achievement.
4. The study found that both teachers (MM=2.74; SD=0.88) and students (MM=2.54; SD=2.54; SD=0.85) indicated student-related factors such as (1) learning styles, (2) study habits and (3) students' achievement motivation were seen as the most important variables which contributed to students' academic achievement in the Aboom Circuit.

5. Hypothesis one found that there was a high negative correlation [r = -0.70, n=377, p < 0.05] between school-related factors and students' academic achievement.
6. Hypothesis two results showed a high positive correlation [r=0.66, n=377, p<0.05] between teacher-related factors and students' academic achievement.
7. Hypothesis three revealed a high positive correlation [r = 0.86, n=377, p < 0.05] between home-related factors and students' academic achievement.
8. Hypothesis four found a moderate negative correlation [r = -0.45, n=377, p < 0.05] between student-related factors and academic achievement.
9. Finally, hypothesis five indicated that the overall model significantly predicts the academic achievement of students, [r = 0.674, R^2 = 0.309, R^2adj = 0.305, F(4, 372) = 0.957, p = 0.003].

Conclusions

From the findings, it is concluded that factors contributing to students' academic achievement are multi-faceted and could be school-related factors, teacher-related factors, home-related factors and student-related factors. It is also concluded that when the right atmosphere or conditions are created, students can perform well irrespective of their socio-economic statuses or backgrounds background. Finally, because of the positive correlation that exists between teacher-related factors, home-related factors and student-related factors, it is concluded that one can hardly help improve the academic achievement of the students without addressing the challenges associated with

these factors. It must be emphasized that these factors generally do not operate in isolation. Therefore, any attempt to improve the academic achievement of the JHS students in the Aboom Circuit should involve a total package. The recommendations made here include improving parents' attitudes towards the schooling of their children, intensifying supervision of schools, instituting incentives packages for teachers, motivating pupils to learn hard and recognizing individual differences in education and also encouraging guidance and counseling.

Recommendations

Based on the findings and conclusions of the study, the following are recommended:

1. **Concerning School-Related Factors**
    a) It is recommended that the Ministry of Education (MOE)/Ghana Education Service (GES) in partnership with school administrators should provide adequate teaching and learning resources and facilities for effective teaching and learning at the school.
    b) To ensure effective teaching and learning, the Ministry of Education (MOE) and the Ghana Education Service (GES) should collaborate to implement a class size reduction policy effectively as expected. This means that the student-to-teacher ratio should strictly be adhered to.
    c) School administrators and educators should make concerted efforts to provide positive and conducive school atmosphere or climate to enhance students' academic achievement.

d) The Ghana Education Service (GES) should organize in-service and refresher courses and programs for all teachers to intensify the guidance and counseling in schools.

2. **Concerning Teacher-Related Factors**

a) The Ministry of Education (MOE) and the Ghana Education Service (GES) should continually organize seminars, trainings and workshops for all teachers on teaching styles, teaching strategies and classroom management strategies. These trainings will equip teachers with skills, attitudes and knowledge relating to current trends in teaching.

b) It is recommended that school administrators should provide professional development opportunities for all teachers in order to upgrade themselves to be abreast with current educational practices in terms of pedagogical-content knowledge, students' motivation, classroom management strategies and practices.

c) Teachers should also be encouraged to use teaching/learning resources especially modern technological tools that would make their lessons lovely, interesting and that would promote active student participation and effective learning.

3. **Concerning Home-Related Factors**

a) For parents to be aware of matters concerning their children in school, they should actively be involved in schools' activities such as PTA meetings and attending other social gatherings in the school.

b) To ensure effective learning on the part of students, parents should monitor their children's output behavior in terms of assignments, project works, class exercises and terminal examination papers.

c) Through PTA, parents should be educated and advised to access government loan facilities to expand their farms or businesses. This will enable them afford the educational expenses on their children.

4. **Concerning Student-Related Factors**

a) The role of guidance and counseling session in schools is to assists students to be focused on their studies. Therefore, guidance and counseling sessions in various schools should be effectively organised to prevent students' truancy.

b) School administrators in partnership with PTA leadership should educate students on the relevance of education. Through this, students will have intrinsic motivation to study.

c) Through NGOs and other social support systems, students from low socio-economic backgrounds can be given scholarships to motivate them in their studies.

Suggestions for Further Research

Since the study focused on the Aboom Circuit of Cape Coast Metropolis, It is suggested that further studies could be conducted on a wider scale for the purpose of generalization of the findings

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APPENDICES

APPENDIX A

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
DEPARTMENT OF EDUCATIONAL FOUNDATIONS

QUESTIONNAIRE FOR TEACHERS

Dear Respondent,

I am a post graduate student pursuing a Master's Degree in Education at University of Cape Coast. I am conducting a research on the topic **"*Factors contributing to the academic achie-]-]vement of low-SES of JHS students in Aboom Circuit*".** I hereby kindly request you to fill in this questionnaire which will enable the researcher to obtain important information for the research. This questionnaire is in two sections (A and B). The researcher assures you that the information gathered will be treated with utmost confidentiality and for academic purposes only. Your assistance and cooperation will be greatly appreciated. Thank you.

Instructions: Tick (√) where appropriate or fill in the required information.

SECTION A
Background Information of Teachers

1. What is your gender?
   a) Male [ ] b) Female [ ]

2. What is your age?
   a) Below 25 years [ ] d) 35-39 years [ ]
   b) 25-29 years [ ] e) Above 40 years[ ]
   c) 30-34 years [ ]

3. Which religion do you belong to?
   a) Christianity [ ] c) Traditionalist[ ]
   b) Islamic [ ] d) Hinduism

4. What is your marital status?
   a) Single [ ] c) Divorced/separated[ ]
   b) Married [ ] d) Widowed [ ]

5. What is your level of educational qualification?
   a) Diploma/HND [ ] c) Master's Degree[ ]
   b) Bachelor's Degree [ ]

6. For how long have you been teaching?
   a) 1-5 years [ ] c) 11-15 years [ ]
   b) 6-10 years [ ] d) 16-20 years [ ]

SECTION B
Factors contributing to the academic achievement

This section relates generally to *Factors contributing to the academic achievement*. Indicate the extent to which you agree or disagree to the following statement by ticking (√) 1=Strongly Disagree (SD), 2= Disagree (D), 3= Agree (A) and 4= Strongly Agree (SA)

School Related Factors	SD	D	A	SA
1. The school time schedule is followed by the teachers				
2. There are school programmes that help students to learn				
3. There are available library references in the schools				
4. Classroom is comfortable enough for teaching and learning				
5. There is enough space in the library for learning				
6. The school has adequate textbooks for all the subjects in the library				
7. The school has adequate facilities for teaching and learning				
8. In my class, the students are too many				
9. The school compound is clean and orderly for learning				
10. The school provides guidance and counselling to all students				
11. The school ensures that all parents attend school meetings				
Teacher-Related Factors	**SD**	**D**	**A**	**SA**
1. I have mastery of the subject that I teach				
2. I use different methods and strategies for teaching				
3. I teach so many topics in a short period of time				
4. I give relevant examples to support what I am teaching at a particular time				
5. I use different materials/resources (both audio-visual) aids in teaching				
6. I provide different teaching and learning				

activities at a particular lesson				
7. I always criticise the students and put them to shame				
8. I frequently absent myself from the class				
9. I create a warm classroom environment where the students are comfortable asking questions				
10. I make classes enjoyable and interesting.				
11. I help students to understand issues after normal classes				
Home-Related Factors	**SD**	**D**	**A**	**SA**
1. The students live near or afar from the school				
2. All the students live with their parents				
3. Some of the students' parents are working				
4. The students' parents don't have enough time for them				
5. All the students' parents are well educated				
6. The students' parents discuss school activities with their children				
7. The students' parents assist students in their homework				
8. The student's parents always motivate them to learn more				
9. The students live alone or with their siblings after school.				
10. The students' parents/guardians attend school activities				
11. The students' parents want them to attend college				
Personal-Related Factors	SD	D	A	SA
1. The students always sleep in the classroom				
2. The students always feel hungry in the class				
3. The students find it difficult hearing the teachers when the teachers are teaching				
4. The students only study when there is class test or exercise				
5. The students listen to radio/watch TV when learning at home				

6. The students sometimes feel lazy, tired or bored to study.				
7. The students are always disturbed by their friends when learning				
8. The students sometimes copy their assignments from their friends				
9. The students are involved in schools' activities				
10. The students sometimes lack self-motivation to perform well in school.				
11. The students always absent themselves from the school				

Thank you very much

APPENDIX B

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
DEPARTMENT OF EDUCATIONAL FOUNDATIONS

QUESTIONNAIRE FOR STUDENTS

Dear Respondent,

I am a post graduate student pursuing a Master's Degree in Education at University of Cape Coast. I am conducting a research on the topic ***"Factors contributing to the academic achievement of low-SES of JHS students in Aboom Circuit".*** I hereby kindly request you to fill in this questionnaire which will enable the researcher to obtain important information for the research. This questionnaire is in two sections (A and B). The researcher assures you that the information gathered will be treated with utmost confidentiality and for academic purposes only. Your assistance and cooperation will be greatly appreciated. Thank you.

Instructions: Tick (√) where appropriate, or fill in the required information.

SECTION A
Background Information of Students

1. What is your gender?
   b) Male [ ]
   c) Female [ ]

2. What is your age?
   a) 10-13 years [ ]
   b) 14-16 years [ ]
   c) 17-19 years [ ]

3. Which religion do you belong to?
   c) Christianity [ ]
   d) Islamic [ ]
   e) Traditionalist [ ]

4. Which class are you?
   a) JHS 1 [ ]
   b) JHS 2 [ ]
   c) JHS 3 [ ]

5. Whom do you live with?
   a) Both Parents [ ]
   b) Only one parent [ ]
   c) Grandmother/father/other relatives [ ]

SECTION B
Factors contributing to the academic achievement

This section relates generally to *Factors contributing to the academic achievement*. Indicate the extent to which you agree or disagree to the following statement by ticking (√) 1=Strongly Disagree (SD), 2= Disagree (D), 3= Agree (A) and 4= Strongly Agree (SA)

School Related Factors	SD	D	A	SA
1. The school time schedule is followed by the teachers				
2. There are school programmes that help me to learn				
3. There are available library references in the schools				
4. Classroom is comfortable enough for teaching and learning				
5. The school has fast internet access				
6. There is enough space in the library for learning				
7. The classroom location is quite good				
8. The school has adequate textbooks for all the subjects in the library				
9. The school has adequate facilities for teaching and learning				
10. In my class, we are too many				
11. The school compound is clean and orderly for learning				
12. The school environment is conducive for learning				
13. The school has all the necessary physical and material resources to help learn well				
14. The school provide guidance and counseling to all students				
15. The school ensures that all parents attend school meetings				
16. The school infrastructure and materials are in good condition for learning				
Teacher-Related Factors	**SD**	**D**	**A**	**SA**

1. The teachers have more knowledge on the subjects				
2. The teachers have different methods and strategies for teaching				
3. The teachers teach so many topic in a short period of time				
4. The teachers give relevant examples to support what they are teaching a particular time				
5. The teachers use different materials/resources (both audio-visual) aids in teaching				
6. The teachers provide varied teaching and learning activities at a particular lesson				
7. The teacher always use lecture method when teaching				
8. The teachers always criticise me and put me to shame				
9. The teachers are frequently absent from class				
10. The teachers are always late to the class				
11. The teachers create a warm classroom environment where I am comfortable asking questions				
12. The teachers are happy and love it when I do well in school				
13. The teachers make classes enjoyable and interesting.				
14. The Teachers help me to understand issues after normal classes				
15. The teachers give me feedback on my progress in school				
16. The teachers care about me and like me				
Home-Related Factors	**SD**	**D**	**A**	**SA**
1. I live near or far from the school				
2. I don't live with my parents				
3. My parents are working				
4. My parents don't have enough time for me				

5. I do too much household chores				
6. My parents are well-educated				
7. My parents discuss school activities with me				
8. My parents assist me with my homework				
9. My parents motivate me to learn more				
10. I am home alone or with my siblings after school				
11. My parents/caregivers attend school programs				
12. My parents/caregivers want me to attend college				
13. My mother/father has a college degree				
14. After school, I sell to help/support my parents				
15. My parents care about me				
16. My parents/caregivers encourage me to do well in school				
Personal-Related Factors	SD	D	A	SA
1. I always feel sleepy in the classroom				
2. I always feel hungry in the class				
3. It is difficult for me to see clearly on the boards				
4. I find it difficult hearing the teachers when teaching				
5. I study only when there is class test or exercise				
6. I listen to radio/watch TV when learning				
7. I always feel lazy, tired, bored to study				
8. I am always disturbed by my friends when learning				
9. I study only when I like				
10. I always copy assignments from my friends				
11. I am always involved in schools' sporting				

activities				
12. I complete my homework most of the time				
13. I challenge myself to study very hard or be the best because I want to attend college				
14. I always go to class late				
15. I always absent myself from school				
16. I always speak local language in class				

Thank you very much

APPENDIX C

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF EDUCATIONAL FOUNDATIONS
DEPARTMENT OF EDUCATION AND PSYCHOLOGY

Telephone: 233-3321-32440/4 & 32480/3
Direct: 033 20 91697
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Telex: 2552, UCC, GH.
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Email: edufound@ucc.edu.gh

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref:

Your Ref:

15th September, 2016

To Whom It May Concern

Dear Sir/Madam,

THESIS WORK
LETTER OF INTRODUCTION: ESTHER ABA QUANSAH

We introduce to you Miss Esther Aba Quansah, a student from the University of Cape Coast, Department of Education and Psychology. She is pursuing Master of Philosophy degree in Educational Psychology and is currently at the thesis stage.

Ms. Quansah is researching on the topic:

"Factors contributing to the Academic Achievement of low Socio-Economic status of Junior High School (JHS) students in Aboom Circuit".

We would grateful if she is given all the needed assistance toward this necessary academic exercise. Please any information provided will be treated as strictly confidential.

Thank you.

Yours faithfully,

Georgina Nyantakyiwaa Thompson (Ms.)
Principal Administrative Assistant
for: HEAD

Date. 16/9/16

ABOOM A.M.E. ZION 'C'
BOX Ad244/ CAPE COAST
Headteacher
Date. 16/09/16

ST. NICHOLAS ANGLICAN SCH.
P.O.BOX AD.171 CAPE COAST
HEADMASTER
DATE 16/09/2016

APPENDIX D

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref: CES-ERB/COE/2015/034

Your Ref: .....

Date: 18.03.2016

.....
.....
.....

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

The bearer, MS. Aba Quansah ..... Reg. No ~~ED/PPE/14/0002~~ is an M.Phil ~~Ph.D~~ student in the Department of Education and Psychology ....., College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He/She wishes to undertake a research study on the topic Factors contributing to the high academic achievement of low socio-economic status students in the Aboom Circuit of the Cape Coast Metropolis

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed the proposal submitted by the bearer. The said proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/her study. The ERB would be grateful if you would give him/her the necessary assistance that may be needed to facilitate the conduct of the said research.

Thank you.
Yours sincerely.

Dr. (Mrs.) Linda Dzama Forde
(Secretary, CES-ERB)

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